September 1945

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CONSUMERS' RESEARCH

Bulletin

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CONSUMERS' RESEARCH

Vol 16 • No. 3 **BULLETIN** September 1945

Off the Editor's Chest

IN the course of maintaining a shallow-well pump providing household water supply in a country home, an engineer purchased, in accordance with directions that came with the pump, a tube of grease for lubrication. It was supposed to be a very special kind of grease, which sold at $1 for a 2-ounce tube, supplied, not by the manufacturer of the pump, but by one of the largest manufacturers of electric motors in the country. When the engineer proceeded to insert the threads of the tube into the two holes it would presumably fit, he discovered the neck of the tube would fit only one hole. The other was not threaded in a way to fit the grease tube at all.

A letter to the motor manufacturer which had supplied the grease brought the reply that the suggested method of greasing was not the proper way to service the pump anyway; that the plugged holes were intended for only the occasional addition of a small amount of motor oil, and when the pump had run for approximately 10,000 operating hours, or five years of normal service for a unit of this type, the motor should be dismantled and bearings taken out and refilled with grease. No instructions applying to this particular motor came with the grease, and the instructions which did accompany it clearly applied to an entirely different type of equipment (open horizontal motors, rather than vertical enclosed motors).

If the company involved had been a small manufacturer or one that had not made motors in wide variety and in great numbers over a period of many years, such vague or careless handling of the matter would not be surprising. On the contrary, the firm in this instance boasts of a high-powered public relations department that is continually at work maintaining consumers' goodwill and the company's prestige.

The trouble with high-powered public relations is that its practitioners have not had the right training nor have they cultivated an attitude to concern themselves even to a minor extent with the problem of individual members of the public who have particular problems that do not fit into any large scheme of advertising or publicity. It goes without saying that if a motor calls for such specialized handling as this one evidently did and it is a household motor of a common type, the correct transmission of the information about it should not depend upon the competence or carefulness of an intermediate manufacturer who uses the motor in his product, nor even upon a tag attached to the motor, since very often such a tag will never reach the ultimate consumer. Either the necessary directions should be marked prominently on a name plate permanently fastened to the motor itself in a position where it can be clearly seen and read in any reasonably possible position of installation, or there should be a notice informing the consumer that he must obtain specifically identified information from the motor manufacturer before proceeding to oil or otherwise lubricate. If there are oil holes, they should be marked "Oil." If there are grease holes, they should be marked "Grease," and the exact designation of the type of grease specified

(Continued on page 26)

Scientific and Technical Experts and Editors: F. J. Schlink, R. Joyce, M. C. Phillips, A. R. Greenleaf, and Charles L. Bernier. Editorial Assistant: Mary P. Roberts.

Symbols used to indicate sources of data and bases of ratings: A—recommended on basis of quality; AA—regarded as worthy of highest recommendation; B—intermediate with respect to quality, C—not recommended on basis of quality; cr— information from Consumers' Research's own tests or investigations; 1, 2, 3—relative prices, 1 being low, 3 high. Note that price and quality are completely differentiated in CR's listings; **a quality judgment is independent of price**; 44, 45—year in which test was made or information obtained or organized by the staff of Consumers' Research.

It will be advantageous if you will, whenever possible, send prompt notice of change of address at least a month before it is to take effect, accompanying your notice with statement of your old address with name in full. At least three weeks' notice must be given in any case. This rule, however, regarding long advance notice does not apply to military personnel.

¶*CR will, of course, gladly change addresses for men and women in the services as often as required by changes in station and other circumstances.*

★★★For a brief cumulative index of 1945 BULLETINS preceding this issue, see page 26.

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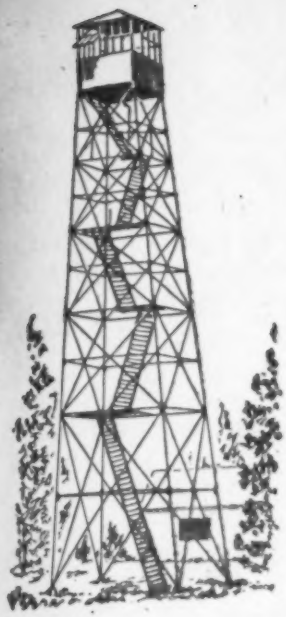


The Consumers' Observation Post

ALUMINUM COOKING UTENSILS, on which sale was suspended by government order in 1941, will no doubt be available to consumers again in the near future. Consumers who were accustomed to buy from door-to-door salesmen should take warning from a recent Federal Trade Commission case and make certain that the particular merchandise they wish to purchase is actually in hand for delivery before they make a down payment or sign a commitment of any kind. In an order handed down on June 29, 1945, the F.T.C. found that Robert W. Hailey, G. P. Hubble, and H. F. Hall, trading as Cookware Associates, had given demonstrations with and taken orders for stainless aluminum utensils known as Health-Craft Ware which they could not supply, and then attempted to substitute Fire Glass Ware or Old Hickory Ceramic Ware; in some cases attempts were made to induce the purchaser to accept partial delivery and wait until the end of the war for the balance. As these dealers refused to cancel contracts or to refund deposits even when they could not make the promised deliveries, the F.T.C. cracked down with an order to discontinue such practices.

* * *

WITH WASHING MACHINES scheduled for early delivery, the homemaker whose washer has broken down completely, or is out of service for lack of some essential part and a repairman to put it in, can look forward once more to doing the family laundry by efficient, energy-saving methods. In the meantime, some excellent advice on more primitive methods comes from the Cleanliness Bureau. In washing very dirty garments such as children's overalls, use the washboard only as a convenient support for the garment and scrub the soiled spots with soap and a brush. An ordinary plumber's suction plunger sometimes called the "plumbers' friend" can pinch-hit for the washing machine plunger, to force swift streams of sudsy water through the fibers of the cloth.

* * *

FOLKS IN MISSOURI are so old-fashioned in their ideas of the proper procedure in government as to think that OPA officials should obey city and state laws just like any ordinary citizen. In Poplar Bluff, when two OPA investigators started unwrapping packages of meat taken from private lockers in a frozen food locker establishment to check the weight, the city health engineer ordered them out until they had obtained the health certificates which are required of all who handle food materials. According to an AP dispatch, both city and state laws forbid such operations without health certificates, which are ordinarily granted after physical examinations by a physician, and proper blood tests.

* * *

SOAP has been rationed in Great Britain during the war. Many well-known brands have been off the market because their makers realized the wisdom of manufacturing only unbranded lines in times when it was not possible to maintain pre-war quality. The entire British soap industry, according to a trade journal in the field, is reluctant to see rationing abandoned. The small firms are automatically allocated a certain amount of raw materials. Sale of their products is assured and competition has been eliminated. The big firms and combines, for their part, find that the existence of sales control and various other restrictions bring them a limited but assured profit and they get along very well with the government ministries in which civil servants find it na-

turally more convenient to deal with two or three large concerns rather than with a dozen or two small ones. In this way the larger companies and trusts tend to get the "inside track" in various ways, and to reap financial advantages without the pains and troubles of having to compete for business with smaller manufacturers. For reasons of a similar nature, there is undoubtedly considerable business support for continuation of OPA and WPB regulations and restrictions on production and distribution of consumers' goods in this country, in the period following the war.

* * *

TREATED DUST CLOTHS for the approaching fall housecleaning season may be satisfactorily made at home according to directions supplied by the California Agricultural Extension Service. To a quart of warm water, add 1 tablespoonful of household ammonia, 1 tablespoonful of mild soap powder, 2 tablespoonfuls of boiled linseed oil or any good furniture polish. Mix thoroughly. Wet any soft cotton cloth in the mixture, squeeze, and hang to dry. Several cloths may be done at one time and treatment should be renewed after cloths are washed. Since any cloth that has been treated with oil, especially a drying-oil like linseed, is a potential fire hazard, it is best to store such dust cloths in a tin can with a metal lid.

* * *

FRESH VEGETABLES put to cook in boiling water retain more of their vitamin C content than those started in cold water. Several State Experiment Stations have made tests with different vegetables including turnip greens, asparagus, green beans, beet tops, and chard which confirm this fact. At the Alabama Experiment Station, for example, it was found that turnip greens put on to cook in their own weight of cold water and cooked for 30 minutes from the time boiling began retained only about one third of their original vitamin C content. Those started in boiling water and boiled the same length of time retained three fourths of their vitamin C.

* * *

BEER AND ALE in earlier days before modern "scientific" brewing techniques were developed were an abundant source of natural vitamins generated by the yeasts that fermented them. Present-day practices eliminate much of this vitamin content by filtering the beer, which removes the yeast cells along with other matter that causes turbidity or cloudiness. Under a new process that has recently been patented the beer is subjected to high pressure under carbon dioxide just before it is to be filtered. When the pressure is removed suddenly, the yeast cells burst, releasing their vitamin content through the liquid and the vitamin substances are not lost when the cell debris is then filtered out.

* * *

PLAY SHOES of the non-rationed variety have been in great demand this past summer, according to a shoe trade journal, as a substitute for children's prewar sneakers. While shoe merchants report that the non-rationed play shoes are not a completely satisfactory substitute for sneakers, they are pleased at the improvement in quality over play shoes available in the two previous summers.

* * *

CEDAR-LINED CLOSETS as they are ordinarily installed do not provide safe, sure protection against moth infestation, according to experts of the U. S. Department of Agriculture. The mere odor of cedar will not destroy moths. If, on the other hand, the closet is constructed (as very few would be) according to the specifications recommended for cedar chests, it may be of some value. Directions call for constructing such a chest from 3/4-inch heartwood of red cedar to the extent of 70 percent of the chest proper. The chest must be tight and in good condition and the clothes must be cleaned or brushed so they are absolutely free of larger moth larvae before they are placed in the chest. Such chests may be veneered on the outside with hard woods if desired.

* * *

FILET MIGNON or beef tenderloin, we reported sometime ago, can be obtained only by eating out in a restaurant. The OPA lawyers found themselves unable to cope with the problem of legally defining it so that it could be assigned a ceiling price for retail sale. Indignant housewives have apparently protested to Washington--a practice, incidentally, that seems to be getting very good re-

(The continuation of this section is on page 29)

Dress Shoes for Men

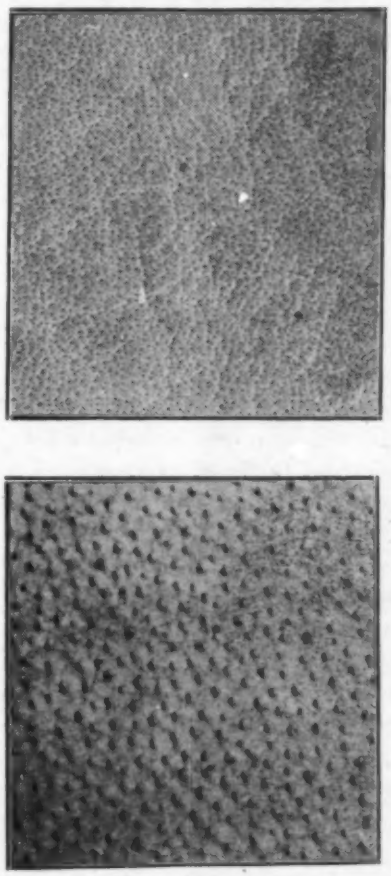
BEFORE Pearl Harbor, the average American bought about 3 pairs of leather shoes annually, according to the statistics. The present rationing system has reduced the adult shoe allowance to 2 pairs a year—provided that there are no children in the family to use up the family's coupons. It is, therefore, more important than ever for men to buy shoes carefully, and to pay especial attention to durability and fit.

There is probably no other article of common use concerning which the average individual knows less than he does about shoes, as to the factors that determine quality; the shoe consumer, besides, very often receives highly unsatisfactory fit.

Details for the Consumer

Shoes are intended primarily for protection of the foot, secondarily for adornment and support of the feet. Shoes for occasional wear or light use may be of light construction, but shoes that are worn often or for long periods of time or are meant for hard use should be strong enough and sturdy enough to support the feet properly and to prevent injury from hard surfaces, such as pavements, or from rough or sharp or protruding objects, such as stones. For a man who must be on his feet on hard floors or hard pavements several hours each day, this would mean that a shoe with a full-thickness sole is needed.

The upper of a shoe should be of such material that it will be strong enough to hold its shape well. Leather heels and soles serve better than any other kind in maintaining the shape of the shoe. Leather heels are more durable than rubber ones and stronger, and they have an additional advantage in that they do not mark floors as do the war-type reclaimed-rubber heels. Because they are less resilient than rubber heels, however, leather heels cause more shock to the wearer when the heel strikes the pavement or floor, and they are of course noisy on uncarpeted floors.



At the top, calf leather (magnified 5 times). At the bottom, kangaroo (magnified 5 times). Note the symmetrical pattern of the hair cells in kangaroo leather.

Photographs courtesy U.S. Dept. of Agriculture

Leathers

The durability of a leather shoe is determined by the kinds of leather used, by the quality and treatment of the material, and by the method of putting the shoe together. Sole leather is made from heavy cattle hides. The best leather is from the "bend" or middle and rear of the animal's back extending downward to the belly, which is twice as durable as leather from the belly, and half again as durable as leather from the shoulder.

Leather may be split into two or more layers. The outer or "grain" layer is the toughest, but the under layers are often processed and used. These lower layers are called "splits"; the upper layer is called "top grain." The top-grain leather may often be recognized by hair holes, but the appearance of grain leather is sometimes cleverly imitated on split leather by skillful embossing.

The three common methods of tanning leather are vegetable tanning, chrome tanning, or combination vegetable-and-chrome tanning. The vegetable-tanning method takes considerable time, but has the great advantage that it leaves the leather more porous and thus makes the shoe more comfortable in hot weather. Chrome tanning is a faster process, but chrome-tanned leather, though tough, is not moisture resistant (water penetrates it quickly)

and chrome-tanned leather soles tend to become slippery when wet. Chrome leather may be identified by its bluish green color below the dyed and finished surface; the cut edges of a finished and dyed piece will show a light bluish green streak down the center; a brown color all over the cut edge usually means that the piece is vegetable tanned. (A good place to observe this is in the eyelet of oxfords—if the eyelet is open and is not a metal or plastic grommet.)

Some leathers are given a combination of chrome and vegetable tannage. Such leather is known as *combination* tanned, or *retanned*, and has some of the good and bad qualities of both tannages. For example, like chrome-tanned leather, a retanned leather is quickly penetrated by water.

Calfskin is commonly used for uppers in shoes, and in the present test all but two of the twenty pairs of shoes tested had calfskin uppers. This leather is strong and pliable without being stretchy, and is water resistant. The initial good appearance is well retained, because calf cleans and polishes well.

"Scotch grain," used for the uppers of the *L. L. Bean* shoe, is a dressy durable leather with a coarse pebbled grain and is made mainly from medium size cattle hides.

Kangaroo was the leather used for the upper of the *Douglas* brand shoe included in this test. Kangaroo is tough and strong—the strongest known leather for a given weight and thickness. Some may find it uncomfortable, however, and it is sometimes susceptible to scuffing.

At the left, the blucher, *with forward extending quarters which are left loose at the lower edge. At the right, a* bal *oxford (the style of all but 3 pairs of shoes in the present test) in which the quarters meet and the vamp is stitched over the quarters at the throat.*

Construction

There are several common methods of shoe construction. The McKay and Stitchdown constructions are used mostly for women's and children's shoes and some workshoes. The Goodyear Welt is generally considered the most satisfactory method for men's oxfords as it makes a shoe that is flexible, comfortable, durable, and easily repaired. This type of construction does not require use of a sock lining in the shoe, as there are no stitches or seams visible on the inside surface of the shoe bottom. The insole or innersole, the upper, and a strip of leather around the edge of the shoe called the welt are sewed together by a stitch which does not penetrate the insole. All the shoes in the test reported were of welt construction.

The vacant space between the insole and outsole, corresponding to the thickness of the welt, is filled with what is known in the trade as "bottom filler." This filler should be firm enough so that it will not "creep" or flatten down with wear (if it creeps badly it can make the shoe very uncomfortable). The most common materials used are granulated cork, felt impregnated with gums or tar, "cushion cork" (sponge rubber and cork), or miscellaneous mixtures made of leather scraps and other materials.

Shoemakers report that all of the common materials tend to migrate, lump, flatten out, or crumble in the shoe.

Some shoes have two different kinds of filler, with the superior type at the toe (because the toe areas are subject to the greatest strains). Rubber compounds, which are sometimes used, should be of types that are very resistant to change of shape when they become heated. The most objectionable fillers are the cheap ones in which the cork is most finely ground, with a binder that becomes softened at a relatively low temperature. Good shoe repairing practice calls for replacement of filler material that has developed bumps or lumps or has become displaced by wear.

Fit

From an orthopedic standpoint, the best type of shoe for a normal foot under average conditions is the oxford "tie" with a low broad heel, straight inner border, and toe broad enough for the individual foot. The orthopedic surgeon who examined the shoes in this test for correctness of shape and other factors important to foot health and comfort notes that the blucher style of oxford is preferable to the bal type because it allows more freedom for the ball of the foot.

The toes of men's shoes are sometimes much too pointed for good foot health and com-

fort. Men's shoes should be fitted so that there is a ½- to ¾-inch space beyond the toes. Not only may the feet elongate a little during the course of the day as the arches sag with fatigue, but shoes tend to become shorter after wear because of bending, shrinkage of the leather, and other causes. The length of the foot should be measured to the longest toe (which is not always the great toe).

In buying shoes, take great care that the toe box is high enough. Height is as important as width, according to one authority, who states that the low-roofed toe is as harmful as the short shoe. One can easily convince himself of the importance of this fault by looking for it on a well-worn shoe; place the hand palm up inside the shoe and touch a finger against the roof of the toe. If there has been pressure of the inside of the toe cap against the toe, there will be a transverse groove or depression. This groove may be toward the inner edge of the shoe or somewhat nearer the center, depending on the shape of the individual foot and shoe.

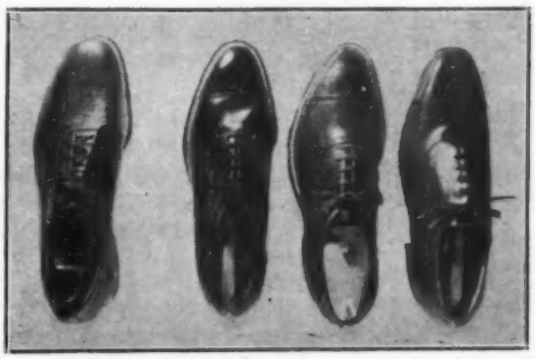
The shoe should fit snugly from the back of the heel to the ball of the foot and the large toe joint should coincide with the point in the shoe where the sole curves inward and up under the arch. The lining should be smooth and free from bumps and wrinkles. In oxfords, there should be enough room over the instep that when the shoe is laced, its upper does not push heavily down on the instep.

There is some indication that current demand is for wider shoes and for larger sizes. Some of this may be due to the demands of returning servicemen who are expected to want shoes with broad and high toes that will give as much freedom and comfort as "GI" shoes. It is expected the post-war shoes for men will range in size from 8½ to 13 or even to 14 or 15, and EE widths will be sold for many ordinary feet—not just flat feet or the feet of heavy men.

CR's Tests

The examination and tests made for Consumers' Research on 20 pairs of men's shoes reflect an evident reduction in the quality of men's shoes. At one time, only the cheapest of men's shoes had paper counters. Thirteen of the samples tested, or about 65% of them, had paper counters. The insole backing, once a complete coverage of canvas, has become a narrow strip in many of the shoes. The recessing of the soling threads into channels cut in the welt and sole is seldom practiced now, thus saving one or two operations in manufacture. Shank pieces have become smaller, if made of metal; many are now wood.

More shoes than usually found in CR's tests had chrome-tanned uppers. Though not necessarily a defect, this quicker and easier method of tanning probably reflects the shortage of labor. Midsoles, and wedges of leather at the heels, were used in some cases to give the appearance of heavy soles. In one shoe, as a matter of fact, only a ¾-inch-wide strip of leather around the sole edge was used to give this appearance. The midsole of the *Bostonian* was paper, and that of the *A. S. Beck* shoe, pressed leather scrap. The *Jarman, Nunn-Bush, Stetson, Walk-Over,* and *French, Shriner and Urner* shoes had midsoles of leather.



From left to right: The L. L. Bean, Roblee, British Walkers, *and* Hanan. *The* L. L. Bean *shoe was the only shoe in the group that was judged to be good as to finish, workmanship, and shape from an orthopedic standpoint. With respect to orthopedic qualities, however, the toe height was too low and the toe shape was only fair. The shape of the toes of the other three shoes was rated poor, from the orthopedic standpoint.*

An examination of the ratings shows that six of the shoes tested had construction rankings considerably higher than their material rankings. These are the *British Walkers, Bean, Stetson, Nunn-Bush, Regal,* and *Endicott-Johnson.* Conversely, the *Jarman, Beck,* and *Hanan* used good materials with poorer construction. The *Bostonian* and *Nettleton* shoes in this test, although the brand names have an excellent reputation among consumers, did not show up well.

As is customary in making CR's purchases of samples for test, the men's shoes included in the present study were all nationally-advertised and widely-distributed brands and were purchased on the open

market. One shoe of each pair was examined by a competent orthopedist for correctness of shape and other factors important to foot health and comfort. The other shoe was dissected and given numerous tests to determine the durability of the materials and details of construction and workmanship. Soles were given tests to determine resistance to abrasion, and to measure resilience; heels were examined as to wear resistance, elasticity, and for their tendency to mark floors. The quality of the upper leather was judged by "break" (creasing quality as shown by the fineness of the wrinkles when the leather is wrapped around a cylindrical mandrel with grain side in—the finer the wrinkling the better the "break"). Some leathers have no break, and these will not maintain good appearance so well as leathers with a fine or high break, although they may have good durability in other respects. Uppers were also tested for tear resistance, and the resistance of the leather to tearing out of stitches was tested.

Expected durability as it was reflected in the quality of materials and workmanship was given the greatest weight in the listings. The ratings for details of construction include consideration of test data on the counters, linings, reinforcements, shanks, sewing threads, and heels. The design of the shoes from the orthopedist's standpoint was also considered in rating; no shoe with an orthopedic rating lower than fair was given an *A* rating.

In the listings which follow, all shoes were dark tan or brown and were bal type oxfords unless otherwise noted. Soles of all shoes were top-grain vegetable-tanned cowhide.

A. Recommended

L. L. Bean (Sold by L. L. Bean, Inc., Freeport, Maine) $6.75. Blucher. Sole of above-average thickness and wear resistance. Rubber heel of about average wear resistance, which marked floor moderately. Upper, Scotch grain retanned chrome leather. Tear resistance of upper leather, much above average. No break. Resistance of leather to tearing out of stitches, much above average. Shank, steel strip and cardboard; counter, paper. Judged fifth in quality of materials. General shape of shoe judged good. Shape of toe judged fair; toe height, poor. Lining, heel pad, and tongue joining judged good. Judged about average in details of construction. Judged from the orthopedic standpoint, this shoe was rated as having good finish, workmanship, and shape; it was the only shoe in the group of 20 pairs tested that was rated good on all three points. **2**

Freeman, Master Fitter (Freeman Shoe Corp., Beloit, Wis.) $8.75. Sole of above-average thickness, below-average wear resistance. Leather heel. Upper, vegetable-tanned, top-grain calf with below-average tear resistance and average break. Stitch strength of leather below average. Shank, steel and cardboard; counter, top-grain cowhide. Judged sixth in quality of materials. Shape of shoe and toe judged fair; toe height, good. Lining, heel pad, and tongue joining, good. Judged third in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **2**

Florsheim, Custom Grade Viking (Florsheim Shoe Co., Chicago) $11. Sole of above-average thickness, below-average wear resistance. Leather heel. Upper, vegetable-tanned, top-grain calf with below-average tear resistance and above-average break. Stitch strength of leather below average. Shank, steel and cardboard; counter, top-grain cowhide. Judged fourth among 20 shoes tested in quality of materials. Shape of shoe and toe judged fair; toe height, poor. Lining and tongue joining, fair. Heel pad, good. Judged second in details of construction. General opinion of finish from an orthopedic standpoint, fair; of workmanship, good. **3**

French, Shriner & Urner, Officers Service Oxford (French, Shriner, & Urner Mfg. Co., Boston) $10.85. Blucher. Sole of above-average thickness and wear resistance. Rubber heel of about average wear resistance, which marked floor slightly. Upper, vegetable-tanned, top-grain calf with above-average tear resistance and below-average break. Stitch strength of leather above average. Shank, steel and cardboard; counter, split cowhide. Judged best of the shoes in the group in quality of materials. Shape of shoe and toe judged fair; toe height, poor. Lining and tongue joining, fair. Heel pad, good. Judged fourth in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **3**

John Ward Mastershoes (John Ward, 25 W. 43 St., New York 10, New York) $10.45. Sole of above-average thickness and wear resistance. Rubber heel of above-average wear resistance, which marked floor slightly. Upper, chrome-tanned, top-grain calf with above-average tear resistance and below-average break. Stitch strength of leather above average. Shank, steel and cardboard; counter, top-grain cowhide. Judged to rank second in quality of materials. Shape of shoe and toe judged fair; toe height, poor. Lining and heel pad, good. Tongue joining, fair. Judged fifth in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **3**

B. Intermediate

A. S. Beck, Super Huskies (Sold by A. S. Beck stores) $4.99. Sole of below-average thickness and above-average wear resistance. Leather heel. Upper, vegetable-tanned split calf with above-average tear resistance. No break. Stitch strength of leather above average. Shank, wood and cardboard; counter, paper. Shape of shoe and toe judged fair; toe height, good. Lining and heel pad, good. Tongue joining, fair. Below average in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **1**

Douglas, Treasurer (W. L. Douglas Shoe Co., Brockton, Mass.) $8.50. Black blucher. Sole of about average thickness and wear resistance. Rubber heel of above-average wear resistance, which marked floor slightly. Upper, top-grain kangaroo with

about average tear resistance and above-average break. Stitch strength of leather below average. Shank, steel and cardboard; counter, pressed paper. Shape of shoe and toe judged fair; toe height, poor. Lining, good. Heel pad and tongue joining, fair. About average in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **2**

Bostonian, Challenger (Commonwealth Shoe & Leather Co., Whitman, Mass.) $8.95. Black. Sole of below-average thickness and about average wear resistance. Rubber heel of about average wear resistance, which marked floor considerably. Upper, chrome-tanned, top-grain calf with below-average tear resistance and above-average break. Stitch strength of leather below average. Shank, wood; counter, pressed paper. Shape of shoe and toe, and toe height, judged poor. Lining, good. Heel pad and tongue joining, fair. Below average in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, judged good. **2**

Jarman, Commodore (General Shoe Corp., Nashville, Tenn.) $8.85. Sole of below-average thickness and wear resistance. Rubber heel of above-average wear resistance, which marked floor considerably. Upper, chrome-tanned, top-grain calf, with above-average tear resistance and about average break. Stitch strength of leather a little above average. Shank, wood; counter, pressed paper. Judged third in quality of materials. Shape of shoe and toe, and toe height, judged fair. Lining and tongue joining, fair. Heel pad, good. Below average in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **2**

Regal J4203 (Regal Shoe Co., Whitman, Mass.) $6.60. Sole of above-average thickness and about average wear resistance. Rubber heels of above-average wear resistance, which marked floor considerably. Upper, chrome-tanned calf, with much below average tear resistance and about average break. Stitch strength of leather below average. Shank, steel and cardboard; counter, top-grain cowhide. Shape of shoe and toe, and toe height, judged fair. Lining, fair. Heel pad and tongue joining, good. About average in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **2**

Roblee, Kent (Brown Shoe Co., St. Louis) $7.95. Black. Sole of below-average thickness and wear resistance. Rubber heels of considerably above-average wear resistance, which marked floor considerably. Upper, chrome-tanned, top-grain calf with below-average tear resistance and above-average break. Stitch strength of leather a little above average. Shank, steel; counter, paper. Shape of shoe and toe, and toe height, judged poor. Lining, good. Heel pad and tongue joining, fair. Below average in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **2**

Walk-Over, Duncan (George E. Keith Co., Brockton, Mass.) $8.95. Black. Sole of below-average thickness, and below-average wear resistance. Rubber heel of below-average wear resistance, which marked floor considerably. Upper, chrome-tanned, top-grain calf with below-average tear resistance and about average break. Stitch strength of leather below average. Shank, steel and cardboard; counter, paper. Shape of shoe and toe judged fair; toe height, poor. Lining, fair; tongue joining, poor. Heel pad, good. About average in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **2**

British Walkers, Continental (J. P. Smith Shoe Co., Chicago) $12.75. Sole of above-average thickness, below average in wear resistance. Leather heel. Upper, chrome-tanned, top-grain calf with below-average tear resistance and about average break. Stitch strength of leather above average. Shank, steel stamping; counter, split cowhide. Judged seventh in quality of materials. Shape of shoe and toe judged poor; toe height, good. Lining, heel pad, and tongue joining, good. Judged first in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **3**

Hanan, Touchstone (Sold at Hanan & Son shoe stores) $9.75. Sole of below-average thickness and wear resistance. Rubber heel of above-average wear resistance, which marked floor considerably. Upper, vegetable-tanned, top-grain calf with about average tear resistance and above-average break. Stitch strength of leather below average. Shank, steel and cardboard; counter, paper. Shape of shoe and toe, and toe height, judged poor. Lining and tongue joining, fair. Heel pad, good. Below average in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **3**

Nettleton, Special (A. E. Nettleton Co., Syracuse) $11.45. Sole of below-average thickness and above-average wear resistance. Rubber heel of below-average wear resistance, which marked floor considerably. Upper, vegetable-tanned, top-grain calf with above-average tear resistance and below-average break. Stitch strength of leather much above average. Shank, steel and cardboard; counter, plastic and filler on canvas. Shape of shoe and toe judged poor; toe height, fair. Lining and heel pad, good. Tongue joining, fair. Heel pad, good. Below average in details of construction. General opinion of finish from an orthopedic standpoint, fair; of workmanship, good. **3**

Nunn-Bush, Commander (Nunn-Bush Shoe Co., Milwaukee) $10.85. Sole of above-average thickness and below-average wear resistance. Rubber heels of above-average wear resistance, which marked floor slightly. Upper, vegetable-tanned split calf with above-average tear resistance. No break. Stitch strength of leather above average. Shank, steel and cardboard; counter, leather. Shape of shoe and toe judged fair; toe height, poor. Lining, good; tongue joining, fair. Heel pad, good. Judged sixth in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, good. **3**

Stetson (Stetson Shoe Co., Inc., South Weymouth, Mass.) $10.95. Sole of about average thickness and above-average wear resistance. Rubber heel of about average wear resistance, which marked floor considerably. Upper, vegetable-tanned, top-grain calf with above-average tear resistance and below-average break. Stitch strength of leather below average. Shank, steel and cardboard; counter, leather. Shape of shoe judged fair; toe shape and height, poor. Lining, fair; heel pad, good. Tongue joining, fair. Judged seventh in details of construction. General

opinion of finish from an orthopedic standpoint, good; of workmanship, good, except for shoe lining. 3

C. Not Recommended

Educator (Educator Shoe Corp. of America, 2 Park Ave., New York 16, New York) $4.95. Sole of below-average thickness and wear resistance. Rubber heel of above-average wear resistance, which marked floor moderately. Upper, chrome-tanned, top-grain calf with much below average tear resistance and about average break. Stitch strength of leather below average. Shank, wood; counter, paper. Shape of shoe judged fair, of toe, poor; toe height, fair. Lining and tongue joining, fair. Heel pad, good. Below average in details of construction. General opinion of finish from an orthopedic standpoint, good; of workmanship, fair. 1

Johnsonian (Endicott-Johnson Corp., Endicott, N.Y.) $5.95. Black. Sole of below-average thickness and wear resistance. Rubber heel of below-average wear resistance, which marked floor slightly. Upper, chrome-tanned, flesh split calf with below-average tear resistance. No break. Stitch strength of leather a little above average. Shank, wood; counter, paper. Shape of shoe and toe, poor; toe height, fair. Lining and tongue joining, fair. Heel pad, good. Below average in details of construction. General opinion of finish and workmanship from an orthopedic standpoint, judged fair. 1

Thom McAn (Sold by Thom McAn Shoe Co. stores) $4. Sole of below-average thickness and below-average wear resistance. Rubber heel of above-average wear resistance, which marked floor considerably. Upper, chrome-tanned, top-grain calf with below-average tear resistance and break. Stitch strength of leather below average. Shank, wood; counter, paper. Toe shape judged fair; toe height, poor. Lining and heel pad, good. Tongue joining, fair. Below average in details of construction. General opinion of finish from an orthopedic standpoint, good; of workmanship, fair. 1

Rubber Nipples for Baby's Nursing Bottles

★ ★ ★ ★ ★ ★

EVERY object that the baby puts into his mouth should be sterilized. With artificial feeding of babies, freedom from bacterial contamination is the most important single factor in avoiding dangers of infection and reducing infant mortality or dangers to health, according to one maternal health expert.

In setting up the routine of feeding the newly-arrived baby, it is essential to take into consideration the ease of preparing the formula, adequacy of storing the bottles, nipples, and the food materials, so that the feeding may be given the baby with minimum risk of contamination, and with greatest convenience for mother in preparation. The maximum efficiency is secured by preparing the formula and sterilizing the bottles and nipples once a day at a given time. The day's supply is then stored in the refrigerator until needed.

The customary advice on care of nipples in pamphlets on baby feeding calls for placing the sterilized nipples in a dry, sterile, covered jar until they are needed. One expert points out, however, that since this procedure involves the use of bottle caps or coverings over the formula-filled bottles, removal of a cap and the putting on of a sterile nipple just before each feeding should require a thorough scrub-up by the mother each time. Such procedure is very hard on the skin. She recommends instead that mothers follow the standard baby hospital procedure which is to place the nipples on the bottles after they have been filled with the formula and then cover them with sterile nipple caps. The bottles are then set in the refrigerator, and when it is time for feeding, one may be removed, placed in the warming bath; the cap is then removed just before the bottle is given the baby. By this method, there is no need to touch the nipple, and the danger of contamination is thereby greatly lessened.

In carrying out this procedure, it is important to select nipple caps that fit completely over the nipple and do not leave the slightest part exposed. Some nipples have a tab on the side that makes for ease of putting them on the bottles; some have two tabs, one on each side. While these flanges may make for convenience, they present a problem in the use of a nipple cap, for it is not likely to fit over the protrusion.

Like most very simple devices, the plain bottle and nipple have been "improved" by various means and are sold at a higher price as special "nursing units." In this connection it is interesting to note the advice of a lecturer and official of a well-known maternal health

organization in New York City, who tells her mothers' classes to buy the cheapest bottle and nipple of adequate design that is available. She is wont to point out that the specially shaped bottles have no particular advantage over the ordinary 5-cent nursing bottle and that it is doubtful that even the specially heat-treated glass is worth the higher price of 15 cents, since a great deal of breakage is due to baby's tossing the bottle out of the crib—and no glass is proof against breakage under such treatment. She recommends a short nipple for the new born baby up to four months and a longer nipple after the fourth month.

In order to determine the relative durability of various brands on the market, a number of nipples, including three of the special "nursing unit" type, were tested by one of CR's consultants. The three special bottle nipples are *Davidson*, *Hygeia*, and *Vitaflo* (essentially the same as *Even-flo*). The *Davidson* nipple has a base ring of heavy rubber with screw threads designed to fit the *Davidson* screw-top bottle. The *Hygeia* fastens over the bottle top like any ordinary nipple, but it is designed to fit the larger-mouthed *Hygeia* bottle. The *Vitaflo* nipple has a flanged and grooved base that is attached to a special threaded bottle by means of a plastic clamping ring. The *Davidson* unit of bottle and nipple sells for 45 cents, with replacement nipples at 15 cents each. The *Hygeia* unit of bottle and nipple is priced at 35 cents, replacement nipples at 20 cents or 21 cents. The special *Hygeia* glass nipple protector is 10 cents. The *Vitaflo* unit of bottle, ring, and nipple is 25 cents, with extra nipples at 5 cents each. Compare these unit costs of 45 cents, 35 cents, and 25 cents respectively with a cost of 5 cents for an ordinary nursing bottle plus 5 cents for *Binky's* nipple (see listings). The *Vitaflo* and *NursRite* nipples make a considerable feature of the fact that they are designed to admit air to the bottle as the infant nurses. This may be an advantage in particular cases, but, as CR's consultant pointed out, the normal healthy hungry baby will soon learn to admit air to the bottle himself. *Pyrex* bottles (15 cents to 25 cents) are grooved at the lip to admit air with any nipple in good condition. Actually the free admission of air has a disadvantage in that it may result in the use of nipples after their rubber has become too flabby to be desirable. A soft or swollen nipple has been found to block the air groove on a *Pyrex* bottle.

Most nipples have three holes. Experience indicates that the size of the holes must be adjusted to the needs of the infant and the viscosity of the formula being fed. Holes may be enlarged with a red-hot needle. Some degree of skill is required for this process for the holes may easily be burnt too large. It is generally better to find a needle of the hole size desired, insert it while cold in the hole to be enlarged, then heat the projecting end in a flame until the hole in the nipple is opened to the desired size.

In use, rubber nipples gradually swell and soften until the changing shape closes the holes, or until the rubber becomes so soft that the pressure of the baby's mouth collapses the nipple. The swelling is generally most severe on the ball end, though the entire nipple is affected to some degree. The change is due to the action on the rubber of the hot water used in sterilization and the butterfat in the milk. The nipples under consideration were not given a life test, but the experience of CR's consultant with the *Davol* brand indicated that they had to be discarded at the end of 5 weeks when they were used 4 times daily, rinsed inside and out after a feeding, stored after air drying, and sterilized for three minutes just prior to use. Nipples used as bottle caps by applying them upside down and partially in-

Tabs aid in putting a nipple on the bottle but are an undesirable feature if they prevent complete coverage by the nipple cap. Proper coverage is shown on the center bottle and nipple. Both the E-Z *nipple (at left), which had two tabs, and the* Hygeia *nipple (at right) which had one, could not be covered completely by nipple caps.*

Left to right: NursRite *and* Vitaflo *nipples.*

side out, as suggested by some makers, would undoubtedly deteriorate at a faster rate. Another objection to this practice is that they would be difficult to remove and use without requiring further sterilization.

Twelve brands of nipples were subjected to boiling and fat exposure tests. They were also rated on ease of application to the bottle while hot and wet, and on their design as to size, shape, and softness. There has been no attempt in this report to rate the nipples on their design with respect to their possible effects on the infant's food habits and mouth and jaw development. So far as is known, no studies along these lines have been reported in scientific or medical literature, although they would make an excellent topic for a Ph.D. thesis of some student specializing in problems of infant health and physical development.

Some nipples were found to fit under a glass *Steri-Seal* nipple cap (9 cents each) better than others. The aluminum *Nip-Cap* (3 for 10 cents) used in many hospitals has been a war casualty and is not available for civilian use at the present time. Its durability and price make it a desirable item for mothers who follow hospital procedure in the preparation of baby's formula, and it should be early on the list of consumers' goods for which aluminum is released. Sterile cellophane closures called *Quicaps* are also available in some drugstores at 39 cents for 160 covers and 80 collars that are designed to be used and discarded. No nipple has had its rating lowered because it could not be covered completely by the glass nipple cap.

B. Intermediate

Binky's 2 in 1 Nipple (Distributed by Binky Baby Products Co., 43 W. 23 St., New York 10, New York) 3 for 15c. Gum rubber. Convenient to attach while hot and wet, and not easily contaminated. Although single tab contributed to ease in attaching, it prevented nipple from being completely covered by *Steri-Seal* nipple cover. 1

C-Thru Nipple, Ring Household No. 13 (The Pyramid Rubber Co., Ravenna, Ohio) 1 for 5c. Transparent dipped gum rubber. Convenient to attach, but could easily be contaminated in putting on. Completely covered by *Steri-Seal*. 1

E-Z The Perfect Baby Nipple, No. 372 (Distributed by E-Z Products, 23 E. 22 St., New York 10, New York) 3 for 15c. Gum rubber. Convenient to attach while hot and wet. Two tabs helped greatly to avoid contamination while attaching, but interfered with complete coverage of nipple by *Steri-Seal*. 1

Davol "Anti-Colic" Nipple with the *'Sani-Tab'* (Davol Rubber Co., Providence, R. I.) 3 for 25c. Gum rubber. Convenient to attach and not easily contaminated. Single tab prevented complete coverage by *Steri-Seal*. 2

Vitaflo Nipples, No. 61 (The Pyramid Rubber Co.) 2 for 10c. Gum rubber. The rubber of this brand was found most resistant to deterioration of any tested; was one of two best with respect to durability. Required special bottle and cap. Attaching nipple in proper position in cap required some play of fingers which introduced a contamination hazard. 2

Davidson No Colic Nipple (Davidson Rubber Co., 50 Brighton, Boston) 1 for 15c. Gum rubber. Requires special bottle. Should be easy to attach. Completely covered by *Steri-Seal*. 3

Hygeia Translucent No. 13 Nipple (Distributed by Hygeia Nursing Bottle Co., Inc., 299 Broadway, New York 7, New York) 2 for 42c. Gum rubber. Requires special bottle. Tab makes it easy to attach without contamination, but special *Hygeia* nipple cap did not cover tab completely. 3

NursRite Nipple (Distributed by Nursrite Baby Products, Inc., 208 Hoffman Bldg., Detroit) 1 for 25c. Red (wartime) rubber. One of the two best nipples with respect to durability of rubber. Stiff and hard to attach, but not readily contaminated. Heavy rubber nipples are rejected by some babies, according to one expert. Too long to be covered by *Steri-Seal*. 3

C. Not Recommended

The following were all found to deteriorate rapidly under test conditions:

Ideal Amber No. 33A Nipple (The Pyramid Rubber Co.) 2 for 5c. Dipped gum rubber. 1

Latex Nipple, Ball Top Style No. 103 (The Pretty-Scheffer Co., Coshocton, Ohio) 2 for 5c. Dipped latex. 1

Faultless Wonder No. 10 Nipple (The Faultless Rubber Co., Ashland, Ohio) 3 for 25c. Gum rubber. 2

Santro Nipple, No. 37 (Julius Schmid, Inc., 423 W. 55 St., New York 19, New York) 3 for 25c. Transparent gum rubber. 2

★ ★ ★

Penetone, manufactured by The Penetone Co., Tenafly, N.J., priced at 69c for a 16-oz. bottle, upon analysis was found to be a solution of 26% potash soap, 3% of trisodium phosphate, with 71% of water, plus some fluorescein dye to give a greenish fluorescent color. Although the manufacturer's claims give the impression that the product is something new and important in cleansers and "amazingly economical" besides, for use in cleaning of floors, painted wood trim, gas ranges, dishes, linens, upholstered furniture, wearing apparel, greasy overalls, even dainty lingerie and stockings, there would seem to be nothing outstanding or unique about the product, and at its price of 69c for 16 oz., it is decidedly not economical to use. (It is calculated that the cost of ingredients to the manufacturer, exclusive of container, would be a cent or two for the 16-oz. bottle.)

"Nylonizing" and "Glamorizing" Hosiery

PREPARATIONS for treating hosiery are still being widely advertised and sold, although such preparations, alleged to make stockings last longer, runproof, run-resistant, and resistant to water-spotting, have been offered for sale to the public for many years. Indeed, as early as 1931, Textile World contained a discussion of such preparations, while the Federal Trade Commission for at least 6 years has cited for misleading advertising manufacturers who advertised their fabric-treating products as eliminating the possibility of, or preventing runs in hosiery and lingerie.

One of several preparations of this type recently analyzed for CR is *Nylo*, a pinkish-orange liquid sold at $1 for a 4-ounce bottle. This appeared to be a solution of a urea-formaldehyde type resin, with a little dye and a cover odor added. This may function in somewhat the same ways as glues, gelatins, etc., which might act to bind the filaments of the stocking together so that they would not be so easily broken or pulled apart as otherwise, according to a textile trade paper article about 15 years ago. It was thought that such a treatment might help prevent damage to the knit structure by scratching and pulling of threads with handling of the stocking during manufacture.

According to the Bureau of Standards, a treatment for hose that has been proved of some value is that of using aluminum sulphate in the proportions of two teaspoonfuls of aluminum sulphate to one-half pint of warm (not hot) water. Stockings washed in mild soap, well rinsed in tepid water, and soaked for 30 minutes in the aluminum sulphate solution were found to be water repellent and resistant to spotting. The process also tended to improve the elasticity of some silk stockings and to reduce the tendency to bagginess. But the Bureau stated, "*The treatment will not prevent runs.*"

There is some evidence to indicate that the tensile strength of hose may be affected unfavorably by the treatment. One potassium aluminum sulphate product which also contained some salt and sugar (the additional materials being perhaps added to camouflage the main ingredient [alum]) was found some years ago to have the effect of decreasing average tensile strength of silk stocking fabrics 15% and decreasing the average tensile strength of a rayon lingerie fabric about 35%. (This particular product was one that had a ratio of selling price to cost of ingredients of more than 45 to 1.)

It is probably unnecessary to remind consumers that nearly all the products listed are grossly misrepresented in advertising. They will not make rayon hosiery "look, fit & wear like nylon" nor will they "add glamour." And as CR has noted in an earlier discussion of this topic, there is a great difference, to the legal experts, at least, between *resisting* runs, snags and rips and *preventing* them.

Ratings are cr45.

B. Intermediate

Nylon-Ize with Dip-N-Dry (Repellent Chemical Processing, Inc., New York City) $1 for an 8-fl.-oz. bottle.

(Calculated cost of ingredients, less than 1c.) Found to be essentially a colored solution of aluminum sulphate.

Run-Proof (Run-Proof Mfg. Co., 230 E. Ohio St., Chicago 11) 25c for an "over-1-oz." package. (Calculated cost of ingredients, about 1c.) Found to be principally aluminum sulphate with a small amount of sodium tetraborate (borax). The name *Run-Proof* is of course quite misleading.

C. Not Recommended

Nylo (Nylo Co., Chicago) $1 for a 4-oz. bottle. Found to be a solution of a urea-formaldehyde type of resin with a little dye and cover odor added. Will not "make rayon hosiery look, fit and wear like nylon."

Taftolene (Distributed by Feller-Jones Corp., 303 Fourth Ave., New York 10) 25c for a 1-oz. bottle. (Calculated cost of ingredients, less than 1c.) Found to be a solution of potassium soap with an excess of free fat or free fatty acid. (A soap solution cannot properly be called a "Hosiery Vitalizer" or a means of increasing the life of stockings, as claimed by *Taftolene*.)

Food Quality from the Soil

By WM. A. ALBRECHT, Department of Soils, College of Agriculture, University of Missouri

WITH ever increasing population densities and increased efficiency of agricultural practices that permits farmers to raise larger and larger crops per acre, a new and very important, perhaps even menacing, factor is beginning to appear in man's food supply. This is discussed by Professor Wm. A. Albrecht, Chairman of the Department of Soils of the University of Missouri, who is one of the first to study certain of the most important relationships between the *quality* of the food supply as measured by its capacity to supply needed vitamins and minerals for health and vigor and the character of the soil in which the food is grown.

Man's environment, which determines his health and character, includes the food which he eats and of necessity the soil on which that food was grown or the animals for meat or milk production were fed.

Professor Albrecht has traced in the accompanying article the great importance of soil characteristics and soil constituents in determination of animal and human health and welfare. He has found that the "dumb animals," which still rely chiefly upon instinct for their choice of food, can recognize subtle chemical and biological characteristics that have so far been beyond the skill of the chemist and physiologist to measure or determine. As our soils and our civilizations become older, this question is bound to become one of most vital importance to human health and survival. Perhaps not long hence, consumers will want to know not only who made the flour or processed the meat, but *where* the wheat ground to make the flour was grown or the cattle were grazed and fed, for it is clear that food grown in one region may mean health and strength and in another may mean physical deficiency, weakness, inability to produce normal offspring, even actual illness or disease.

QUALITY of food rather than its bulk is now coming to the forefront of popular attention. We are no longer thinking primarily of the grocer's shelves as the source of food, but of the soil where it was grown. The realization is dawning that our bodies are built from the ground up.

The deficiencies of food are readily noticeable when they take the form of shortages in quantity or bulk, or when "red point" foods are restricted on the shopper's list. Yet the less obvious food failures due to lowered quality are even more serious because they deny us good health. Their shortcomings in this respect have given us ailments caused by malnutrition, and "inside troubles" that have too often been mistaken for infections from the outside.

More recently the positive aspects of food have drawn attention as we learn that *high quality in food* is the surest means of keeping us healthy, buoyant, good-natured and more efficient in our daily output. Localities like Hereford, Texas, which has become known as "the town without a toothache," as well as animal assays of the fertilized crops, are all pointing to the soil as the foundation on which good food, good health, and sound bodies are built.

"Different plants grow on different soils" we say as a matter of course, but we fail to see in that remark the more important corollary that plants are different because different soils make them so by feeding them

The animals are careful selectors of their feeds according to quality when given an opportunity to discriminate. They make better growth when they can select from the available herbage that which is best adapted to their nutritional needs.

TVA Photo

differently. Plants, first, and animals, next, are successive stages in the assembly line of a factory fabricating our foods from the raw materials of the soils on which they grow. The soil contributes about a dozen of the sixteen or more elements that go into the building of plants, animals, and our own bodies. These dozen make up only 5 per cent, by weight, of the final product, but they determine whether or not the other four elements coming from air and water will be fabricated into something more than fuel substances only—sugar, starch, cellulose, and wood. These products of air and water—that is, of the weather—provide the energy that men or animals utilize. They are the fattening or the "go" foods. It is the soil and its fertility that provide the "grow" foods, the proteins, the vitamins, the minerals, and many other complexes for building and reproducing our kind. Weather readily gives food with bulk and food energy, but leaves us with "hidden hungers." On the soil and its fertility depend our satisfaction and good health.

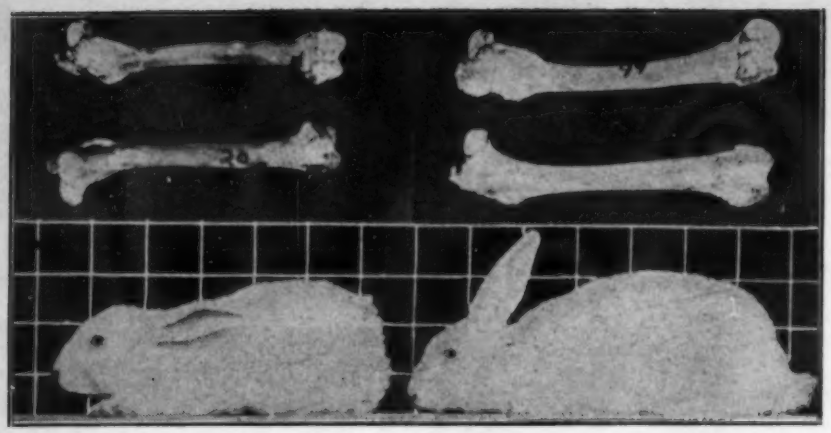
The dumb animals have long been demonstrating their choice of foods in terms of quality. The grass really is greener—and more nutritious—out on the highway or railroad right-of-way where the crops have not been harvested and the fertility of the soil has thus not been depleted.

The cow "risking her neck" on the barbwire fence failed until recently to inform us of this truth, but received a yoke for her neck as evidence of our ingratitude and lack of understanding. Cattle have selected the drill rows of barley that had been given two hundred pounds of fertilizer, while they disregarded the very next drill rows that had received only half that much enrichment of the soil. Cattle have been selecting one of four haystacks annually in the same field *for eight years* because that stack had in its hay from twenty acres, hay from some five acres that were once given a top dressing of fertilizers.

Hogs have selected and hogged down first the area of a forty acre field where alfalfa, grown years before, had been given lime and phosphates. "Even the pig if given a chance to select his ration will make a hog of itself in less time than we can" was the way Professor Evvard of Iowa put it. Animals are connoisseurs of the quality of their feeds as deter-

In this 40-acre cornfield the hogs ate first the corn in parts where the soil had once been limed for alfalfa. Cliff Long Farm, Warrensburg, Missouri.

Photo, Virgil Burk, County Extension Agent



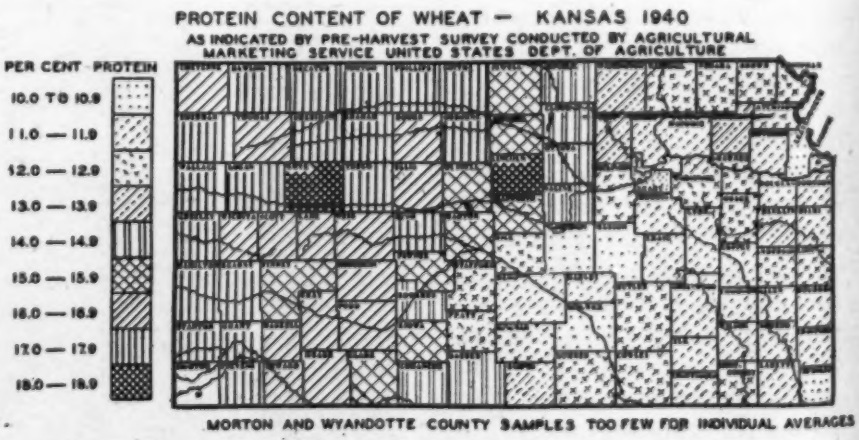
Better animals and stronger bones, better fur and better other products result from better soils. Quality of feed must be "grown in" from the soil. The picture shows the difference in size and bone characteristics of two rabbits, one feeding on herbage raised on soil without mineralization; the other on properly fertilized soil.
Missouri Agric. Experiment Station Photo

mined by the soils that produce them.

Humankind, too, in a general way have localized their foods according to the fertility of the soil. "Soft" wheat has been said to grow in regions of higher rainfall while "hard" wheat was considered common where there is lesser rainfall. The truth of the matter is that hard wheat is a mineral-rich, high-protein output by the plant in localities where the lower rainfalls and less intensive cropping have left more fertile soils. Soft wheats are mainly starchy grains that represent bulk of chemically reacting and concentrated water, air, and sunshine, accumulating where too little fertility of the soil is left to fabricate proteins, provide minerals and build food quality equal to that of hard wheat. In the soil is to be found the reason why the harder wheats taken as a whole make bread the true staff of life.

Soft wheat is going west. High yields of crops for several successive years have removed fertility so rapidly that wheat varieties formerly considered "hard" wheat have gone "soft," to the disgust of the bakers. Quality in this case *must be grown into the grain*, and equivalent quality cannot be thrown into the milled products by chemical helps or additions.

It may seem strange that the American bison should have roamed over about the same territory over which "hard" wheat grows. But this big beast of heavy bone and ponderous brawn was a grass eater only. He made no trading post purchases of either protein concentrates or minerals to supplement his diet. This same soil area is today the seat of the "range" cattle that literally raise themselves as did the thundering buffalo herds of long ago. Cattle go eastward for their "finishing schools," to be fattened where the "soft" wheat grows. Hogs are grown there, too, by help of extra nutrients "shipped-in" in the form of wheat bran and are then fattened on corn. The quality needed in a "grow" food is provided by growth on the more fertile, mineral-rich soils in the western area. The fattening power of a "go" food is provided by growth on quite another soil of lower mineral fertility. Growth requires a higher biologic quality of feeding stuffs than mere fattening, as the fats in the body are produced by simpler raw materials than constitute the flesh and

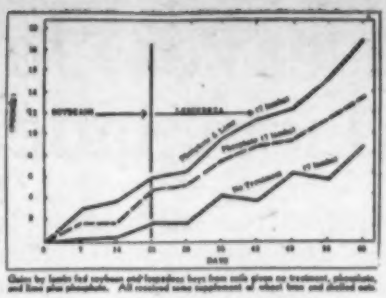

PROTEIN CONTENT OF WHEAT — KANSAS 1940
AS INDICATED BY PRE-HARVEST SURVEY CONDUCTED BY AGRICULTURAL MARKETING SERVICE UNITED STATES DEPT. OF AGRICULTURE
PER CENT PROTEIN
10.0 TO 10.9
11.0 — 11.9
12.0 — 12.9
13.0 — 13.9
14.0 — 14.9
15.0 — 15.9
16.0 — 16.9
17.0 — 17.9
18.0 — 18.9
MORTON AND WYANDOTTE COUNTY SAMPLES TOO FEW FOR INDIVIDUAL AVERAGES

The wheat plant as a manufacturing business of making protein has a bigger output as the soil is less leached. (Centuries of leaching or subjection to percolation by the water of rainfall and melting snows remove much valuable mineral matter from the soil.) Using the lower tier of counties in Kansas to go from east to west and from 37 to 17 inches of rainfall, the protein of wheat goes up from 10 to 17 percent. The character of the wheat is determined more by the fertility of the soil than by the rainfall, whence the harder, more mineral-rich food grain comes from the region of higher fertility and lower rainfall; thus soil rather than weather determines nutritional quality.
Marketing Service, U. S. Dept. of Agriculture

growth materials, the proteins, vitamins and minerals.

Feeding trials of animals as well as their discriminating choices in utilization of food are calling attention to the quality of the food as grown into it. Gains by sheep have been much larger from hays grown on soils given lime and phosphate than on hays from soils without these fertility treatments, hays which look the same and are the same as judged by ordinary chemical and agronomic tests. Rabbits under similar tests have demonstrated better growth and better reproduction when feeding on forage produced on fertile soils. All of these improvements occurred *without increases in the bulk of foods consumed.* For most people, better health is not a matter of eating *more* food, but one of eating *better* food, better because the plants manufacturing it were well supplied by the soil with those essential elements from which quality food can be fabricated.

Garden vegetables, like the greens in particular, are now being examined for their food quality according to the soil quality producing them. Spinach has demonstrated alarming variations in its content of minerals—the very element for which it has been so much heralded. As a producer of bulk and verdant green it does well if given plenty of nitrogen. But, as a deliverer of calcium and other minerals, it is too often a gross deceiver when limited by deficiencies of the soil. Then, in addition, it may make of itself so much oxalate as to convert not only its own mineral calcium into undigestible forms, but also may change to this condition some of the calcium of milk usually fed to babies along with it. Other vegetables, too, are coming into prominence because like spinach "they are easily grown" and for that reason are making bulk, but may be deceptive in quality. Those that require fertile soil and "are hard to grow" may after all be the quality foods. There is much to be done by way of the choice of what we grow, and then by way of improving the fertility of the soil on which it grows.



From Missouri Agricultural Experiment Station

The soil is after all the basis of life. Its contributions may be only the handful of dust into which the warm, moist breath of creation is blown. It is essential, nevertheless, that even that small amount of soil contain all the dozen elements needed, otherwise even the crowning product of creation may lack a sound healthy body and have instead a bulk that is mainly the product of the water and air we call weather. Quality in our foods, and thereby health in our bodies, must be built from the ground up.

Overpowered Auto Engines

Americans, After the War, May Be Glad to Give Up That Luxury

THE National Petroleum News suggests that there may be an interest in small automobiles which can operate on smaller amounts of gasoline per mile than the cars which have been popular in the United States. One of the editors of this trade journal, writing from England, comments: "We are inclined to put up our noses at the small cars, especially of the Austin variety, but after riding in both good small English cars and a full-sized quality American car, used by the army, I must say the small car rides easily, handles well and, if one does not want to get up to 75 or 85 miles an hour on some straight-aways, which are rare here, one is just as comfortable and saves money in the smaller cars . . . . I'll confess that views I have had for years, until they became prejudices, have pretty well vanished. . . ."

CR has for years urged greater interest on the part of the automobile manufacturers in the production of cars that would consume considerably less gasoline per mile. This view found little sympathy in the industry under pre-war conditions when supplies of gasoline seemed inexhaustible, and prices, even with the heavy government taxes, seemed moderate. Perhaps with post-war conditions, the American motorist will begin to wonder why he should go on paying a heavy premium for riding behind an engine which has twice as much power and accelerating ability as he needs under any but the most exceptional conditions. Many people, no doubt, who are not greatly interested in high-speed driving and extreme hill-climbing ability will learn that an occasional gear-shifting operation is a small price to pay for 50% to 75% more miles per gallon of gasoline.

Jams, Preserves, Jellies, and Marmalades

In countries where fruit is scarce, jams and preserves are used extensively because their sugar content makes the limited amount of fruit go farther—and also, of course, acts as a preservative—it is customary to eat such products with a spoon, like canned fruit. In the United States, however, jams and jellies are customarily used as spreads for bread and crackers, and are—or were before the present days of shortages—usually used in addition to butter.

From the nutritive standpoint, jams and jellies are essentially in the same class as sugar. Their chief contribution to the diet is their calories. It has been estimated that two tablespoonfuls of jelly supply about 100 calories. Since the American diet is already high in sugar, it is obvious that there is no great need for jellies or jams as a source of calories or "energy," although in times of butter shortage they may help to make bread and toast more palatable. There is some suggestion that in England marmalade is regarded as an important source of vitamin C. Studies have shown considerable variation in the vitamin C content of both homemade and commercially made orange marmalade. Apparently, however, a large portion of the vitamin C content of the oranges is lost in the cooking process. Dr. Henry Borsook has pointed out in his book, Vitamins, that only an individual with a superhuman marmalade capacity could eat enough to secure the needed amount of vitamin C in this fashion. It has also been reported that cranberries lose their vitamin C potency when made into jelly.

Jams and jellies are customarily made at home from fresh fruit and berries, although occasionally women may can the juice unsweetened, to be made up later. Manufacturers of commercially made products, however, that are a year 'round rather than a seasonal proposition, preserve the raw material in bulk in one form or another. In the United States fruit is largely cold-packed for later use. Strawberries, for example, are packed in barrels with added sugar and held in cold storage until needed. Peach and pineapple jam are made from canned fruits, as a rule. In England and Canada, berries and fruit for jam making are preserved in barrels in solutions of sulphur dioxide. The practice is not general in the United States. It is sometimes difficult to drive off a sufficient proportion of the sulphur dioxide in making the finished product without too vigorous boiling, which impairs the flavor.

Successful jelly requires the four ingredients, sugar, water, acid, and pectin in the correct proportions. Women who make jam and jelly at home know that best results are secured by using well-ripened fruit for flavor and color, with some under-ripe fruit for acid and pectin. Sometimes the homemaker adds commercial pectin when she is using a fruit that is low in pectin, for example, quinces or berries such as raspberries or strawberries, or she may combine them with apple juice, which is rich in pectin. She may also add lemon juice to supply needed acid. In commercial practice, such acids as citric, tartaric, malic, or lactic acid may be used. In marmalade, for which no standards have been adopted, phosphoric acid may be used. One trade journal in the field has recommended the use of phosphoric acid because it costs less than citric or tartaric acid, but phosphoric acid should never be used in a food or beverage product, as it has distinctly harmful effects on teeth. Unfortunately for consumers who want to purchase the highest quality jams or jellies that use nothing more than the natural fruits and berries combined with sugar, the Food, Drug and Cosmetic Act does not require that the presence of added acids used as "acidulants" be declared on the label when used within certain limits. The State of North Dakota has a much better standard in this respect, in that it requires that any preserve, jelly, jam, marmalade, or fruit butter which contains any added thickener, gelatinizing agent, fruit acid, pectin, color, or other ingredients, excepting vinegar and spices, shall bear on the label a statement of the name and amount of each added ingredient.

Since lactic acid occurs in milk, malic acid in apples, tartaric acid in grapes, citric acid in oranges and lemons—all commonly eaten items of food—chemists are wont to take the position that these acids may be added to food mixtures with

impunity. Recent researches in the field of tooth decay and its causes, however, indicate that overuse of any and all acids, whether "natural fruit acids" or otherwise cause erosion or decalcification of the teeth and so pave the way for decay. (Phosphoric acid, particularly when combined with sugar as in a soft drink, has been found in various studies, including work done recently at the Naval Medical Research Institute, Bethesda, Md., to be especially hard on the teeth.)

The use of a chemical preservative such as sulphur dioxide may be legal, but it is undesirable, and its declaration on the label should put the consumer on guard. The Director of the Food and Drug Division of the Kansas State Board of Health, Evan Wright, warned last year in a magazine article that if foods contain either sulphur dioxide or benzoate of soda "you may rest assured that they are inferior products, because properly processed foods do not need chemical preservatives." He pointed out that the ability of the better food manufacturers to get along without chemical preservatives is proof that they are not necessary. E. H. S. Bailey and Herbert S. Bailey in "Food Products—Their Source, Chemistry, and Use," comment on this point:

"There is no necessity for adding any preservative other than sugar, if care is exercised in the selection of the fruit that is used, and in the process of preserving. Sodium sulfite and sodium benzoate were the preservatives that once came into most general use. There is danger that carelessness in manufacture or bad stock be more or less covered up by the use of chemical preservatives."

Federal standards of identity permit the use of vinegar, lemon juice, citric acid, lactic acid, malic acid, tartaric acid, or a combination of such acids "in a quantity which reasonably compensates for deficiency, if any, of the natural acidity of the fruit ingredient." Pectin from apples or citrus fruit may be added "in a quantity which reasonably compensates for deficiency, if any, of the natural pectin content of the fruit ingredient." Use of sodium citrate, sodium potassium tartrate, or a combination of both in certain limited amounts are permitted and need not be declared on the label. Sodium benzoate or benzoic acid or a combination of both may be used as preservatives, but must be declared on the label. In addition to ordinary sugar (sucrose), invert sugar syrup, corn sugar or dextrose in certain specified proportions may be used. Honey may be used but must be declared on the label. Jams, jellies, and preserves are required to use 45 parts of fruit to 55 pounds of sugar (or other permissible sweetener). Since no definitions and standards have been adopted for marmalades, all of the ingredients used in their manufacture must be declared on the label.

Consumers who are interested in keeping low-grade products out of their pantries and off the market will be well advised to read the label carefully, in detail, before purchasing jams or jellies. Products of good quality are made with fruit and sugar and need only bear on the label the name of the fruits or berries used in the order in which they predominate. Thus a blackberry jelly that uses apple juice to supplement or supply the pectin will carry the name Blackberry Apple Jelly. Sometimes several fruits or berries will be combined; in such cases all names must appear on the label in order of their predominance.

There is one hazard in natural fruit jelly that is often unavoidable, which occurs in grape jelly. Crystals of cream of tartar (potassium acid tartrate) may form which are like bits or slivers of glass. One case of serious gastro-intestinal difficulties was reported several years ago in the Journal of the American Medical Association of a woman who had eaten some grape jelly that was gritty. Some of the crystals that she had swallowed were measured and found to be as much as a quarter of an inch long. One way of eliminating such crystals is to allow the juice to stand overnight and then siphon it off carefully, in a way to leave all solid substances behind. Consumers will be well advised to refrain from eating any grape jelly that appears to be gritty.

The government standards for jams, jellies, and preserves are so low that one would think manufacturers could have little difficulty in complying. There have, however, been numerous cases reported in Notices of Judgment where jellies and preserves were found to be misbranded because they were mixtures of less than 45 parts fruit to 55 parts of sugar or other permissible sweetener. In this connection it should be noted that all jams, jellies, and preserves that do not meet the government standards for fruit content must carry the word "imitation" prominently on their label.

During the past few months the stocks of jellies and jams on grocers' shelves have been fairly ample—although by the

time this report appears in print they may be "under-the-counter" items. In view of the sugar shortage, it seems quite likely that households that formerly depended on homemade products will be obliged to use commercial brands. To provide some guide to quality, CR purchased a number of brands of jelly, jam, and marmalade and had them subjected to organoleptic tests for flavor, bouquet, and consistency in the case of jams and preserves, and character of the gel, in the case of jellies and marmalades, by a competent firm of consulting chemists specializing in food grading and analyses. The percentage of soluble solids was also determined in each case to determine their compliance with Federal standards of identity. In the last-named respect, all samples tested were found to meet the minimum government requirements. Ratings are cr45.

A. Recommended

JAMS

Ruby-Bee Brand Supreme Quality Pure Grape Jam (Packed by Mitchell Syrup & Preserving Co., Detroit) 2 lb., 33c. Excellent flavor and bouquet.

Welch's Grapelade (Packed by The Welch Grape Juice Co., Westfield, N.Y.) 1 lb., 22c. Excellent flavor and bouquet.

PRESERVES

Dickinson's Pure Wild Blackberry Preserves (Packed by The Dickinson Co., Portland, Oreg.) 1 lb., 51c. Excellent flavor and bouquet. Consistency, stiff.

L & S Pure Damson Plum Preserves (Packed by Lutz & Schramm, Inc., Pittsburgh) 1 lb., 29c. Excellent flavor and bouquet. Consistency, ideal.

Louis Sherry Pure Grape Preserve (Distributed by Louis Sherry Preserves, Inc., Long Island City, N.Y.) 1 lb., 25c. Excellent flavor and bouquet. Consistency, ideal.

A. Recommended (cont'd)

Schimmel Damson Pure Preserves (Packed by The American Preserve Co., 3rd & Lehigh, Philadelphia) 1 lb., 25c. Excellent flavor and bouquet. Consistency, ideal.

JELLIES

Ann Page Pure Currant Jelly (Packed by The Great A & P Co., 420 Lexington Ave., New York 17, New York) 12 oz., 20c. Flavor and bouquet excellent. Character of gel, tender.

Tea Garden Red Currant Jelly (Packed by Tea Garden Products Co., 755 Sansome, San Francisco 11) 12 oz., 31c. Excellent flavor and bouquet. Character of gel, tender with some bleeding.

William P. Hartley's Quince Jelly (Packed by R. U. Delapenha & Co., Inc., 57 Laight St., New York 13, New York) 1 lb., 35c. Excellent flavor and bouquet. Character of gel, tender.

MARMALADES

Ann Page Pure Orange Marmalade (Packed by The Great Atlantic & Pacific Tea Co.) 1 lb., 18c. Ingredients declared on label: Sugar, orange juice, orange peel, dextrose, pectin, and lemon juice. Good flavor. Excellent bouquet. Character of gel, tender.

Crosse & Blackwell's Pure Orange Marmalade (Packed by The Crosse & Blackwell Co., Baltimore) 1 lb., 25c. Ingredients declared on label: Seville oranges and sugar. Excellent flavor and bouquet. Character of gel, firm.

Wm. P. Hartley's Orange Marmalade (Distributed by H. Kellogg & Sons, 2nd & Race, Philadelphia 6) 1 lb., 28c. Ingredients declared on label: Fruit and sugar. Excellent flavor and bouquet. Character of gel, tender.

B. Intermediate

JAMS

Chivers' Grape Jam (Distributed by Adolph Goldmark & Sons, Corp., 81 Beach, New York 13, New York) 1 lb., 26c. Good flavor and bouquet.

Overland Grape Jam (Packed for S. S. Pierce Co., 133 Brookline Ave., Boston 15) 1 lb., 30c. Good flavor and bouquet.

* * *

The following was considered of slightly lower quality than those immediately preceding:

Ann Page Pure Grape Jam (Packed by The Great Atlantic & Pacific Tea Co.) 1 lb., 24c. Fair flavor (too sweet). Good bouquet. Texture, grainy.

PRESERVES

Aunt Jane's Open Kettle Pure Grape Preserves (Distributed by J. J. Gielow & Sons, Inc., Detroit, Mich.) 1 lb., 18c. Good flavor but too sweet. Good bouquet. Texture, grainy.

Premier Plum Preserves (Distributed by Francis H. Leggett & Co., 12th Avenue & 27th St., New York City) 1 lb., 25c. Good flavor and bouquet. Consistency, ideal.

Tea Garden Concord Grape Preserves (Packed by Tea Garden Products Co.) 1 lb., 26c. Flavor and bouquet excellent. Consistency, very syrupy. Grape hulls present.

JELLIES

Heinz Grape Jelly (H. J. Heinz Co., Pittsburgh, Pa.) 11½ oz., 21c. Flavor and bouquet excellent. Character of gel, tender. Texture, slightly grainy (undesirable).

Musselman's Pure Apple Grape Jelly (Packed by The C. H. Musselman Co., Biglerville, Pa.) 12 oz., 14c. Excellent flavor and bouquet, but was so sweet as to be insipid. Character of gel, tender.

MARMALADES

S and W Marmalade (Packed by S & W Fine Foods, Inc., 155 Berry, San Francisco 7) 1 lb., 23c. Ingredients declared on label: Citrus fruits (oranges, grapefruit, and lemons), sugar, pectin, and fruit acid. Good flavor. Excellent bouquet. Character of gel, tender.

Welch's Orange Marmalade (Made by The Welch Grape Juice Co., Westfield, N.Y.) 1 lb., 20c. Ingredients declared on label: Oranges, sugar, and citric acid. Good flavor and bouquet. Character of gel, very firm.

C. Not Recommended

MARMALADES

Ocean Spray Orange Cranberry Marmalade (Packed by Cranberry Canners, Inc., Hanson, Mass.) 1 lb.,

C. Not Recommended (cont'd)

23c. Ingredients declared on the label: Sugar, oranges, cranberries, lemons, and water. Fair flavor and bouquet, but was so sweet as to be insipid. Character of gel, soupy (poor).

Old Virginia Superior Quality Pure Citrus Marmalade (Manufactured by Old Virginia Packing Co., Inc., Front Royal, Va.) 2 lb., 19c. Ingredients declared on label: Sugar, grapefruit pulp, trace of sulphur dioxide—and phosphoric acid, a decidedly undesirable addition to any food or beverage product. Good flavor and bouquet. Character of gel, very firm.

Stokely's Finest Sweet Orange Marmalade (Distributed by Stokely Bros. & Co., Inc., Indianapolis) 2 lbs., 39c. Ingredients declared on label: Sugar, oranges with added phosphoric and citric acid (see comment under *Old Virginia* on phosphoric acid). Good flavor and bouquet. Character of gel, very firm.

It Is Not Necessary to Be Fat

By M. BECKETT HOWORTH, M. D., N. Y. Orthopaedic Hospital

OBESITY is due primarily to the consumption of more food than the body needs for its current activity. The excess food is converted into fat.

The process is an insidious one in which the overeater ignores the first few pounds, excuses the next few, and then reaches the point where he or she does not care or will not admit the cause of the weight increase. The obese person can think of more excuses for her condition than any other type of patient. She is extremely hard to convince of the real trouble. She resists vigorously the idea of diet control, but I have never yet seen a patient who was not grateful and happy after the weight was lost.

The difficulty with most fat people is that they like fattening foods. They may not eat more than others, but they eat mainly the foods which are fattening. They are as hopeless addicts of the wrong foods as inveterate cigarette smokers are of tobacco.

Weight control is a matter of simple arithmetic. The patient who eats more food than her body needs gains weight. The patient who eats less loses weight. Some foods are much more fattening than others. The chief offender is bread, in all its forms. The fat person likes bread and eats lots of it, often six or eight slices a day. Bread is over fifty percent starch and a slice of bread supplies seventy-five calories. Whole wheat or rye bread, toast, rolls, crackers, and similar items are just as fattening as white bread. One slice of bread per day more than the body needs corresponds to about sixty pounds of extra body weight in twenty years. This is what happens to many people. At age twenty-five they are of normal weight. They eat one slice of bread per day more than is needed. At age forty-five they are considerably overweight. The one extra slice of bread or its equivalent is responsible.

The simplest method of weight reduction is to start with the first excess pound and omit one slice of bread daily. When a later start is made, the diet must be stricter. It may be necessary to reduce the daily bread to only a single slice. Other starchy foods such as potatoes, macaroni, spaghetti, noodles, cake, pudding, and pastries, rice, corn, and cereals should be omitted entirely.

Sweets are the weakness of other overweight persons. Sugar, candy, honey, molasses, syrups, preserves, jams, and jellies consist of almost pure sugar and are "worth their weight in fat." Soda fountains and candy shops should be avoided by the obese and by those who tend to gain weight beyond that normal for their age and bodily type. Saccharin may be used instead of sugar for sweetening.

Fats and oils are fattening, but are usually taken in smaller quantity than the starches and sweets. Butter, fried foods, fat meat, heavy cream, and mayonnaise should be reduced to a minimum.

Many fruits and most vegetables are not fattening. Pineapple and banana, however, contain about twenty percent sugar and should be eaten in limited quantity. There are a few other fruits that are fattening among which may be mentioned raisins, canned and fresh prunes, pears, grapes, and apples. Fruits canned or cooked with sugar, such as peaches, preserved figs, and the like, are fattening. Grape juice is bottled with added sugar (twenty percent) and is therefore fattening. Most vegetables are not fattening. Rice and corn are considered cereals rather than vegetables, and are quite fattening. Potatoes, peas, and all sorts of beans (except string beans) contain twenty to twenty-five percent starch and should be eaten in limited quantity. Other fruits and vegetables may be eaten freely.

The fat person complains that there is nothing left for her to

eat, but this is not true. She may have many fresh fruits and berries, nearly all the vegetables, and milk, meat and eggs, which are the basic foodstuffs and which contain the essential food elements.

The patient dieting to reduce should lose about two pounds per week. She should weigh herself at least twice a month on the same scales, nude, or with approximately the same weight of clothes. A slow, steady weight reduction is satisfactory. *No reduction in weight is an indication of failure to keep the diet, or of an unsatisfactory diet.*

There are other factors in weight reduction such as sleep and rest, exercise, digestion, and health. The patient who sleeps and digests well and rests a lot tends to gain weight. The person who is physically active, who has poor digestion, or is beset with emotional disturbance tends to lose weight. Wasting illness causes weight loss.

It is a common fallacy to believe that an operation, especially on the gall bladder or pelvic organs, will cause a gain in weight. No operation causes a gain in weight except by restoring the patient's health and appetite and because of his temporary inactivity. The glands affect appetite, digestion, and activity, but in normal persons have no other effect on the weight, which can be controlled by diet regardless of the glands. Thyroid and other glandular preparations should not be given for weight reduction unless the patient has some other definite indication for the glandular preparation, such as a low basal metabolism, and even then such a preparation is to be used only under careful medical supervision.

Water has nothing to do with the weight of a patient unless there is a heart or kidney ailment resulting in edema of the tissues. This is not a true gain in weight, but water-logging of the body tissues. Similarly, laxatives are not weight-reducing, except as they cause temporary removal of water from the system.

Exercise will reduce weight, but much vigorous exercise is required to remove a single pound. The football player, the worker in heavy industry, the soldier on active duty, consumes food amounting to 3500 to 4000 calories per day and does not gain weight. The average individual in normal life requires about 2500 calories per day. The bedridden individual in good health may require only 1500 calories. Thus the individual with the 4000 calorie appetite and the 2000 calorie energy output will most certainly gain weight.

Obesity is particularly pernicious in children, as it tends to interfere with their normal physical development. The growing child needs proteins, vitamins, and minerals, which are largely found in the non-fattening foods. *When he concentrates on starches and sweets, he does not get enough of the essential foodstuffs.* He will tend to be flabby and to develop weak arches, knock knees, and poor posture. He becomes clumsy, and will be poor at sports, and tasks requiring skill and strength, and tends to avoid them for this reason. As a result, his muscles do not develop, and a vicious cycle follows.

Psychiatrists tell us that the mother tends to overfeed the unwanted or unloved child in order to free herself of a feeling of guilt. Overeating and consequent obesity give him a warm, comfortable, satisfied feeling around the middle, which serves as a substitute for affection. The mother also overfeeds the child to bribe him, or to keep him quiet. But in the long run she does great harm. Similar situations occur with adults, especially those with some juvenile hangovers of a psychologic character.

Obesity is harmful to the adult, too. It diminishes his physical capacity and effectiveness. Obesity strains the arches and produces flat feet, increasing the tendency to calluses, corns, and bunions, as well as sprains. Knock knees and bow legs are made worse and cause more pain because of obesity. Osteoarthritis, commonly affecting the feet, knees, and hips, is aggravated or even produced by obesity. Heart disease, high blood pressure, and diabetes are more common in fat people, and more serious. Major surgical operations are more dangerous in the obese person. No definite benefit from obesity has ever been demonstrated.

Obesity can be prevented or corrected. *Diet is by far the most important factor.* A knowledge of the relative fattening effect of the various foods is important. Daily application of this knowledge to the eating habits of the individual is essential, and requires determination. But the rewards are great.

Foods for the Fat

A. Recommended

Thin soups.

Meat: Lean meat, including poultry and fish. Not fried.

Eggs.

Cheese: Except cream cheese.

Milk: Skimmed or buttermilk preferred.

Vegetables: Except grains (cereals) and potatoes. Peas and beans (except string beans) should be limited.

Fruits: Except pineapple, raisins, canned and fresh prunes, pears, apples, peaches, preserved figs, and grapes (and grape juice).

Gelatine desserts: Without sugar. Use saccharin for sweetening.

B. Intermediate

Fruits: Pineapple, banana, and fruits canned with sugar.

Vegetables: Potatoes, peas, beans (except string beans).

Coffee, tea: Without sugar or cream (use saccharin for sweetening).

Salads (with French dressing).

C. Not Recommended

Rich soups and gravies.

Creamed foods.

Bread: All kinds, including whole wheat, rye, crackers, rye crisp, zwiebach, rolls, biscuits, pancakes.

Macaroni, spaghetti, noodles.

Grains: Rice, corn, wheat, oats and their flours and products.

Fats and oils: Butter, cream, mayonnaise, fat meat, fried foods.

Sugar, candy, syrup, molasses, preserves, jams, jellies, honey, fountain drinks.

Cake, pudding, pastry, pie, tapioca, ice cream.

Gelatine desserts, such as *Jello* (contains a large percentage of sugar).

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★ ★ ★ ★ ★ ★

THE above advertisement, which appeared recently in one of the popular photographic magazines may have prompted many amateurs to part with a dollar in the belief that here, ahead of time, was one of those wonderful post-war improvements that today we are hearing so much about. Actually, the formula proved to be neither new or important, but a method of *hypersensitizing an emulsion by use of mercury vapor* (reported more than seven years ago by F. Dersch and H. Duerr) to be used in conjunction with a paraphenylenediamine developer. The instructions titled "Shoot at Weston 500—Formula to a New Photographic Era" call for treating the film before and after exposure by placing it in a hard rubber or bakelite (not metal) tank containing 6 to 10 drops of mercury. (To prevent the mercury itself from coming into contact with the film, the liquid metal is placed in a small bakelite bottle cap or glass container.) The tank is then sealed with scotch tape and the mercury vapors permitted to act on the film for a period of 72 hours. As the mercury vapors penetrate paper, it is not necessary to unroll roll film, but film packs should be opened up slightly after the cap or end of the metal casing is removed. Such treatment of film before exposure, for a period of 24 to 30 hours, according to Dersch and Duerr, increases the speed of film by a factor of 1.5 to 2.5 without affecting contrast or introducing fog.

The effect of the mercury vapor on the speed of the film is not permanent, and the increased sensitivity gradually disappears when the film is removed from contact with the vapor, while at the end of about a month the film will be slightly slower than before the vapor treatment. The theory of the mercury hypersensitizing process is that the mercury-vapor atoms in contact with the film emulsion before exposure are absorbed or adsorbed by the sensitivity nuclei of the emulsion, which increase in size and sensitiveness. If the process is carried too far, the size of the nuclei will become such that fog is produced. Only experience will show how much exposure to mercury vapor any given film will stand without fogging. When the film is treated after exposure the mercury vapor acts to intensify the latent image.

The disadvantages of using the mercury-vapor process are: (1) the effectiveness will vary greatly with different emulsions; (2) it is inconvenient; and (3) mercury vapor is an exceedingly subtle and dangerous poison, so that mercury should never be handled by anyone not cognizant of its hazards and possessed of proper equipment to minimize the danger, facts which the C & A Laboratory neglected to mention.

Even if the higher of the figures of 1.5 to 2.5 for the speed-increasing effect of the

mercury process given by the authorities previously mentioned is correct, a film having a Weston Speed of 100 would still be a long way from a speed of 500. To take care of this, the promoters give a developer formula with a warning that no other developer will work and attempted substitution will result in failure. The warning is of the wrong sort, for a warning was in order regarding the use of their recommended developer, which is one containing paraphenylenediamine, a very poisonous substance that requires extreme precautions in handling and may be actually dangerous to those who are allergic to it. The formula recommended by the C & A Laboratory is essentially the same as that for the fairly well-known *Edwal 12* developer whose manufacturer claims that when *Edwal 12* is used only one-half normal exposure is required. Thus under the most favorable circumstances it is conceivable that a fast film would be increased in effective speed to approximately Weston 500 by use of the mercury-vapor method, if the developing, too, is done with a developer having the property of increasing the effective emulsion speed.

The five claims made in the advertisement sound impressive, but like so much other advertising, do not bear close scrutiny. "Cuts flash bulb costs 50% or better," seems greatly exaggerated—indeed high speed of the emulsion is not at all a complete substitute for the use of flash-bulb lighting. "Makes photofloods unnecessary," is a misleading claim, if it means that ordinary mazda bulbs can be substituted for photofloods. The output of the No. 1 photoflood is listed as 8650 lumens; the assumed 5-to-1 boost in film speed would then require an illumination of 1730 lumens to replace the photoflood; four or five 60-watt bulbs would probably be required to produce the photographic effect of an illumination of 1730 lumens at the color temperature of the photoflood. "Makes F:4.5 lens equal to F:2," is the only definite claim of the five, and is correct on the assumption of a 5-to-1 boost in film speed. "Makes indoor action shots easy," doesn't mean much. Indoor action shots are "easy" anyway if flash bulbs are used. "All gain—no loss," may be true provided the worker takes adequate precautions against both mercury poisoning and paraphenylenediamine poisoning, and provided also that he is fortunate enough not to lose some films by fogging, with the mercury treatment.

Selling a well-known formula of this sort appears to be chiefly a way to get dollars from credulous amateurs, particularly when there is a strong possibility that the dollar will have to be followed by another $1.50 for a quart of the developer which the promoter also sells. (No doubt many would be forced to make the additional purchase, since fortunately for photo-amateurs, paraphenylenediamine developers are not in wide or general use and sale.) If anyone does want to make use of the C & A "discovery," he may do so without spending the $1.50 on the "special" developer, for *Edwal 12* selling at 76c per quart, just about half the price, will serve equally well.

* * *

A new method of hypersensitizing film has recently been reported by the Ansco Research Laboratories. Detailed instructions are lacking, but it consists essentially of subjecting the film, in a closed tank, to the vapors of a mixture of formic and acetic acids, or of acetic acid alone, for one to two hours. Treatment is best carried out after exposure, and within a short time before development. The treatment is stated to work best with high-speed film, and is said to increase the speed of this by 200 to 300 percent. Not only is the method asserted to be free from danger of fogging the film, but the acid vapors (although irritating) should be less dangerous to health than mercury vapor.

★

BUY WAR BONDS

AND STAMPS

Another of the Many Misrepresented Household Cleaning Products

★ ★ ★

Dri-Kleen is a chemical mixture sold as a cleaner for all fabrics, for upholstery and rugs, walls, painted woodwork, tile, etc. Directions call for one heaping teaspoon in a cup of warm water made up to a gallon with cold water. *Dri-Kleen* was found on analysis to consist of trisodium phosphate, 58%; sodium sesquicarbonate, about 14%; synthetic organic detergent (a soap substitute or detergent of a nature similar to *Dreft* and *Drene*), about 2% (with sodium sulfate about 4% and sodium chloride about 22%, substances commonly present in organic "soapless detergents" as commercially marketed).

The Federal Trade Commission had ordered the promoters of this product to cease certain misrepresentations including the use of the term "dri-kleen" or similar words as part of the brand name. The brand name obviously misrepresents the use and character of the product, since *Dri-Kleen* as used is actually a *wet* cleaner, the solvent used for the operation being water, and not a substance like naphtha or carbon tetrachloride traditionally associated with the term dry-cleaning.

The strongly alkaline mixture of trisodium phosphate and sodium sesquicarbonate which *Dri-Kleen* contains is, of course, wholly unsuited to the proper or safe laundering or "dry-cleaning," so-called, of many types of fabrics. In addition, there were marked misrepresentations for the product in other respects, as in the allegation that it would effectively remove dirt, grease, and stains from all wearing apparel. As with most of the widely marketed household cleaning liquids and powders, the retail price of 50c for 8 oz. is wholly out of line with the cost of ingredients, which would be something like 1c for the 8 oz. quantity.

★ *Diaperwite, a Widely-Sold Washing Powder* ★

Diaperwite, a product sold by by Diaperwite Co., 99 Hudson St., N.Y.C., for the purpose of deodorizing diapers, and preventing chafing, etc., sells at 25c for one pound. It is a white, odorless product completely soluble in warm water, which forms a lather and gives a strongly alkaline action when dissolved. The product consisted chiefly of mineral matter, mainly sodium pyrophosphate ("tspp") with an appreciable amount of sodium carbonate and sodium silicate, the last two being alkalis of a kind commonly found in strong soaps. The organic matter in the material was a superfatted soap with about one-half of 1 percent of free fat. In view of this composition, it can be seen that most of the claims on the label are misleading or grossly exaggerated. "The perfect diaper wash—Deodorizes as it cleans" will mislead the consumer, since a product containing so much strong alkali is hardly a perfect material for household laundering purposes, and such deodorizing properties as *Diaperwite* possesses would be those available in any common alkali such as washing soda.

The claim that the product will "protect your baby against the harmful chafing and irritation that can be caused by irritating diapers" is also misleading, as such chafing and irritation are usually caused by the action of the caustic chemicals that remain in the fabric and the lime salts that are precipitated on the fabric from washing in hard water. Both the carbonate and silicate in this product are quite caustic in action and are bound to have a deleterious effect on the fabric. Further, they will not prevent the deposit of lime salts on the fabrics and the effect of harshness on the skin which is due to these.

Off the Editor's Chest

[Continued from page 2]

at that point.

Several years ago, a writer in Nation's Business took businessmen to task for careless handling of just such cases in ways which needlessly sacrificed consumer goodwill. It appears that the writer in question decided to wax his own car. He bought at the local service station a brand of wax which carried on the label a statement that this particular wax had been tested by the oil company's laboratories and approved. After he had done a good job of applying the wax, the result was beautiful until the first summer shower turned the job into what he described as "a sticky, blubbly mess." Upon reporting the matter in a polite letter to the district office of the oil company, he received no answer. A second letter in which he pointed out that it cost him $5 to have the stuff removed from his car brought a curt reply that since the company did not manufacture the wax, it could not be responsible for the results. Finally a letter to the main office of the refining company brought the prompt reply that the matter would be referred to their research department; that was the last he heard of the matter.

With a high-powered publicity department doing its stuff, and with the corporate accounting department dealing in six and seven figure sums, the large manufacturer too often feels that it is of little importance for him to handle small items or pay attention to the details of consumers' problems and complaints. This is a mistake, for the more the large companies fail to carry out intelligent policies toward the consumer, the more small companies, which do not mind handling and caring for one, two, and three figure accounts, will take over. The captains of industry must be aware that in the days of keen competition for the consumer's favor that will inevitably come in the postwar reconversion days, failures to make good or to render intelligent service on what appear to be small matters, will count against even large well-established firms with big appropriations for publicity and advertising.

One solution for preventing such occurrences is to transfer the so-called expediters, who during the war have had the task of getting to a plant all the materials needed on a particular war job so that production would not be delayed at any point, to the problem of coordinating the output, instructions, and correspondence of the various departments. With such coordination, one department would not sell a grease for a job that another department held would be better handled by some other method of servicing, and when the motor manufacturer did sell grease, it would go out accompanied by instructions that applied to the particular motor regarding which the customer wrote —not some equipment which he has never seen and will never use.

Such an attitude toward customers is more than a matter of detail. It represents a corporate point of view and outlook that will not only prevent the development of consumer ill-will, but will keep the company out of trouble with governmental agencies like the Federal Trade Commission. It has been reported that the Commission is very fully staffed with young lawyers; many of these will undoubtedly be quite active in finding and, if possible, making reasons for their continued employment when the economy drive that is starting in Congress really gets under way.

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†Indicates that listings of names or brands are included.

Ratings of Motion Pictures

THIS section aims to give critical consumers a digest of opinion from a number of reviews, ranging from the motion picture trade press to Parents' Magazine, which rates motion pictures not only on their quality as entertainment but on their suitability in various aspects for children.

It should be emphasized that the motion picture ratings which follow do not represent the judgment of a single person but are based on an analysis of the reviews appearing in some 19 different periodicals. (See January 1945 issue for the sources of the reviews.)

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), and C (not recommended).

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

adv—adventure
biog—biography
c—in color (Technicolor or Cinecolor)
car—cartoon
com—comedy
cri—crime and capture of criminals
doc—documentary
dr—drama
fan—fantasy
hist—founded on historical incident
mel—melodrama
mus—musical
mys—mystery
nov—dramatization of a novel
rom—romance
soc—social-problem drama
trav—travelogue
war—dealing with the lives of people in wartime
wes—western

A	B	C		
—	—	5	**Adventures of Kitty O'Day**	*cri-com A*
—	11	4	**Affairs of Susan, The**	*com A*
—	9	3	**Along Came Jones**	*wes AYC*
4	5	—	**Anchors Aweigh**	*mus-com-c AYC*
—	5	1	**And Then There Were None**	*cri-mys A*
—	2	5	**Army Wives**	*war-com A*
—	2	1	**Arson Squad**	*cri-mel AYC*
—	9	1	**Back to Bataan**	*war-dr A*
—	4	2	**Beautiful Cheat, The**	*mus-com A*
—	5	5	**Bedside Manner**	*com A*
5	5	1	**Bell for Adano, A**	*war-dr A*
—	4	12	**Belle of the Yukon**	*mus-mel-c A*
—	6	—	**Bells of Rosarita, The**	*mus-wes AYC*
—	7	10	**Betrayal from the East**	*war-mel A*
—	6	7	**Between Two Women**	*dr A*
—	3	5	**Bewitched**	*dr A*
—	2	2	**Beyond the Pecos**	*wes AYC*
—	3	7	**Big Bonanza, The**	*wes A*
—	3	5	**Big Show-Off, The**	*mus-com A*
—	2	6	**Blonde Fever**	*com A*
—	2	5	**Blonde from Brooklyn**	*mus-com A*
—	—	6	**Blonde Ransom**	*mus-com A*
1	11	1	**Blood on the Sun**	*war-mel A*
—	12	3	**Body Snatcher**	*cri-mel A*
—	1	5	**Boston Blackie's Rendezvous**	*mel A*
—	2	5	**Bowery Champs**	*mel AYC*
—	11	3	**Brewster's Millions**	*com A*
—	9	4	**Brighton Strangler, The**	*cri-mel A*
—	12	3	**Bring On the Girls**	*war-mus-com-c A*
—	2	8	**Bullfighters, The**	*com A*
2	11	4	**Can't Help Singing**	*mus-dr AYC*
2	4	—	**Captain Eddie**	*biog-dr AYC*
—	2	3	**Caribbean Mystery, The**	*mys-mel A*
—	—	5	**Castle of Crimes**	*mys-mel A*
—	5	4	**Cheaters, The**	*dr AYC*
—	2	5	**Chicago Kid**	*cri-mel A*
—	7	8	**China Sky**	*war-mel A*
—	4	4	**China's Little Devils**	*war-mel A*
—	3	4	**Christmas in Connecticut**	*com A*
—	6	5	**Circumstantial Evidence**	*cri-mel A*
—	1	4	**Cisco Kid Returns**	*wes AYC*
1	14	1	**Clock, The**	*war-rom A*
—	—	—	**Col. Blimp (See Life and Death of)**	
2	9	2	**Conflict**	*cri-mel A*
5	5	6	**Corn Is Green, The**	*dr A*
—	2	1	**Corpus Christi Bandits**	*wes AYC*
—	10	6	**Counter-Attack**	*war-dr A*
—	—	3	**Crazy Knights**	*cri-mel AYC*
—	5	4	**Crime Doctor's Courage, The**	*mys-dr A*
—	5	3	**Crime, Inc.**	*cri-mel AYC*
—	2	7	**Dancing in Manhattan**	*mel A*
—	2	6	**Dangerous Passage**	*mel A*
—	1	2	**Dawn Over France**	*hist-dr A*
—	5	8	**Delightfully Dangerous**	*mus-com A*
—	5	7	**Destiny**	*mel A*
1	11	4	**Diamond Horseshoe**	*mus-com-c A*
—	7	8	**Dillinger**	*cri-mel A*
—	3	2	**Divorce**	*dr A*
—	3	3	**Docks of New York**	*cri-mel AYC*
—	4	7	**Don Juan Quilligan**	*com A*
—	5	5	**Double Exposure**	*cri-com A*
—	5	6	**Eadie Was a Lady**	*mus-com A*
—	6	7	**Earl Carroll Vanities**	*mus-com A*
3	6	5	**Enchanted Cottage, The**	*dr A*
—	2	1	**Enemy of the Law**	*mus-wes AYC*
—	10	—	**Enter Arsene Lupin**	*cri-mel A*
—	2	8	**Escape in the Desert**	*war-mel A*
—	3	4	**Escape in the Fog**	*war-mys A*
—	3	4	**Eve Knew Her Apples**	*mus-com A*
—	10	4	**Experiment Perilous**	*cri-dr A*
—	5	5	**Falcon in Hollywood**	*cri-mys A*
—	1	5	**Falcon in San Francisco**	*cri-mys A*
—	—	—	**Farewell, My Lovely (See Murder, My Sweet)**	
—	1	5	**Fashion Model**	*cri-mel AYC*
—	4	2	**Fighting Guardsman, The**	*adv A*
12	3	—	**Fighting Lady, The**	*war-doc-c AYC*
—	11	4	**Flame of Barbary Coast**	*mus-mel A*
—	1	2	**Flame of the West**	*wes A*
—	4	2	**Fog Island**	*mys-mel A*
—	5	7	**Frisco Sal**	*mus-dr A*
—	3	5	**Frozen Ghost, The**	*mys-mel A*
—	4	6	**G. I. Honeymoon**	*war-com A*
—	1	2	**Gangs of the Waterfront**	*cri-mel AYC*
—	1	2	**Gangster's Den**	*wes AYC*
2	7	3	**God is My Co-Pilot**	*war-dr AY*
—	5	5	**Great Flamarion, The**	*cri-mel A*
—	7	4	**Great John L., The**	*mus-mel A*
—	8	2	**Grissly's Millions**	*cri-mys A*
1	13	3	**Guest in the House**	*cri-mel A*
1	4	1	**Guest Wife**	*com A*
—	4	—	**Gun Smoke**	*wes AYC*
—	5	3	**Guy, a Gal, and a Pal, A**	*rom A*
—	13	3	**Hangover Square**	*cri-mel A*
—	4	10	**Having Wonderful Crime**	*cri-com A*
—	3	3	**Her Highness and the Bellboy**	*rom AYC*
—	1	9	**Her Lucky Night**	*mus-com AYC*
—	9	5	**Here Come the Co-eds**	*mus-com AYC*
—	13	2	**Here Come the Waves**	*war-mus-com A*
—	—	8	**Hi, Beautiful**	*mus-com A*
—	4	1	**Hidden Eye, The**	*cri-mys AYC*
—	3	7	**High Powered**	*mel A*
—	3	4	**Hitchhike to Happiness**	*mus-com AYC*
—	5	1	**Hollywood and Vine**	*com AYC*
1	8	3	**Hollywood Canteen**	*mus-com A*
—	2	5	**Honeymoon Ahead**	*mus-com A*
—	6	8	**Horn Blows at Midnight, The**	*com A*
1	9	3	**Hotel Berlin**	*war-mel A*
—	8	4	**House of Fear**	*mys-mel AYC*
1	1	9	**House of Frankenstein**	*cri-mel A*

A	B	C		
—	6	2	**I Love a Mystery**	*mys A*
1	5	3	**Identity Unknown**	*war-dr AYC*
2	14	1	**I'll Be Seeing You**	*war-dr A*
—	3	8	**I'll Remember April**	*mus-dr A*
—	4	5	**I'll Tell the World**	*mus-com AYC*
2	9	1	**Incendiary Blonde**	*mus-mel A*
—	8	7	**It's a Pleasure**	*mus-com-c A*
1	13	2	**It's in the Bag**	*cri-com AYC*
—	—	7	**Jade Mask, The**	*mys-mel A*
—	1	3	**Jealousy**	*mys-mel A*
—	—	—	**John Dillinger (See Dillinger)**	
—	2	7	**Jungle Captive**	*mel A*
2	10	—	**Junior Miss**	*com AYC*
—	5	10	**Keep Your Powder Dry**	*war-dr A*
6	9	1	**Keys of the Kingdom**	*dr A*
—	1	4	**Kid Sister, The**	*com A*
—	2	6	**Lady Confesses, The**	*cri-mel A*
1	5	6	**Lake Placid Serenade**	*mus-com AYC*
—	3	1	**Last Hill, The**	*war-dr A*
—	—	1	**Law of the Valley**	*wes AYC*
—	7	3	**Leave It to Blondie**	*com AYC*
—	4	5	**Let's Go Steady**	*mus-com AYC*
4	8	2	**Life and Death of Col. Blimp**	*war-dr-c A*
—	4	4	**Main Street After Dark**	*cri-dr A*
—	1	6	**Man Who Walked Alone**	*war-com A*
—	3	3	**Marked Trails**	*wes AYC*
2	13	—	**Medal for Benny, A**	*dr A*
—	4	7	**Meet Miss Bobby Socks**	*mus-com AYC*
—	1	6	**Missing Corpse, The**	*cri-com A*
—	5	3	**Missing Juror, The**	*cri-mel A*
—	11	2	**Molly and Me**	*mus-com A*
—	2	2	**Moulin Rouge**	*mus-com A*
3	6	4	**Mr. Emmanuel**	*war-dr A*
—	3	2	**Muggs Rides Again**	*mel AYC*
—	4	5	**Mummy's Curse, The**	*mys-mel A*
—	7	7	**Murder, He Says**	*cri-com A*
—	3	8	**Murder in the Blue Room**	*mus-cri-com A*
—	15	2	**Murder, My Sweet**	*cri-mys A*
—	14	2	**Music for Millions**	*mus-dr AYC*
—	4	4	**My Gal Loves Music**	*mus-com A*
6	10	1	**National Velvet**	*dr-c AYC*
—	4	7	**Naughty Nineties, The**	*mus-com AYC*
—	3	—	**Navajo Trail, The**	*wes AYC*
—	5	3	**Nevada**	*wes AYC*
—	2	6	**Night Club Girl**	*mus-com A*
—	7	5	**Nob Hill**	*mus-dr-c A*
—	4	5	**Nothing But Trouble**	*com AYC*
5	6	2	**Objective, Burma**	*war-mel A*
1	4	5	**On Approval**	*com A*
—	4	3	**On Stage Everybody**	*mus-com AYC*
—	2	5	**One Exciting Night**	*cri-com A*
—	5	—	**Our Vines Have Tender Grapes**	*dr AYC*
1	11	1	**Out of This World**	*mus-com A*
—	3	—	**Over 21**	*com A*
1	8	7	**Pan-Americana**	*mus-com A*
1	9	3	**Patrick the Great**	*mus-com AYC*
—	1	7	**Penthouse Rhythm**	*mus-com A*
—	2	4	**Phantom of 42nd St., The**	*cri-mel A*
—	5	3	**Phantom Speaks, The**	*mys-mel A*
—	8	8	**Picture of Dorian Gray, The**	*cri-mel A*
—	7	6	**Pillow to Post**	*war-com A*
—	2	7	**Power of the Whistler**	*mys-mel A*
—	13	4	**Practically Yours**	*war-com A*
—	4	5	**Randolph Family, The**	*com A*
—	2	1	**Return of the Durango Kid, The**	*mus-wes AYC*
6	3	2	**Rhapsody in Blue**	*mus-biog AYC*
—	—	4	**Rhythm Round-Up**	*mus-wes AYC*
—	2	4	**Road to Alcatraz**	*cri-mys AYC*
—	—	4	**Rockin' in the Rockies**	*mus-wes AYC*
—	—	6	**Rogues Gallery**	*cri-mel A*
—	1	9	**Rough, Tough, and Ready**	*war-com A*
1	7	7	**Roughly Speaking**	*dr A*
1	9	6	**Royal Scandal, A**	*com A*
—	5	10	**Salome, Where She Danced**	*mus-dr-c A*
1	9	7	**Salty O'Rourke**	*mel A*
—	2	1	**Sante Fe Saddlemates**	*wes AYC*
—	—	7	**Scared Stiff**	*mys-com AYC*
—	3	4	**Scarlet Clue, The**	*mys-mel A*
—	4	10	**See My Lawyer**	*mus-com AYC*
—	4	5	**Sergeant Mike**	*war-dr AYC*
—	2	1	**Shanghai Drama, The**	*mel A*
—	4	4	**She Gets Her Man**	*cri-com AYC*
—	5	5	**She's a Sweetheart**	*war-mus-dr AYC*
1	6	—	**Silver Fleet, The**	*war-mel A*
—	8	7	**Something for the Boys**	*mus-com A*
2	5	6	**Son of Lassie**	*war-mel-c AYC*
—	2	5	**Song for Miss Julie, A**	*mus-com A*
—	—	10	**Song of the Sarong, The**	*mus-adv A*
6	9	3	**Song to Remember, A**	*hist-dr-c A*
1	6	3	**Southerner, The**	*soc-dr A*
—	2	3	**Spell of Amy Nugent, The**	*mel A*
—	1	5	**Steppin' in Society**	*com A*
4	4	—	**Story of G. I. Joe**	*war-dr AYC*
—	6	2	**Strange Illusion**	*cri-mel AY*
—	1	2	**Stranger from Santa Fe**	*wes AYC*
—	6	8	**Sudan**	*mus-mel-c A*
1	13	2	**Sunday Dinner for a Soldier**	*war-com AYC*
1	11	4	**Suspect, The**	*cri-mel A*
—	—	9	**Swing Out, Sister**	*mus-com A*
—	2	6	**Tahiti Nights**	*mus-com A*
—	5	6	**Tarzan and Amazons**	*adv AYC*
—	2	6	**Ten Cents a Dance**	*mus-com A*
1	8	—	**That's the Spirit**	*mus-fan A*
—	—	4	**There Goes Kelly**	*mus-com AYC*
—	2	3	**They Came to a City**	*fan A*
—	5	2	**They Shall Have Faith**	*dr AYC*
1	10	5	**Thin Man Goes Home, The**	*cri-mel A*
8	8	—	**Thirty Seconds Over Tokyo**	*war-dr A*
—	8	4	**This Man's Navy**	*war-dr AYC*
—	2	3	**Thoroughbreds**	*mel A*
—	8	8	**Those Endearing Young Charms**	*war-rom A*
1	7	1	**Thousand And One Nights, A**	*mus-fan-c AYC*
8	5	5	**Three Caballeros, The**	*mus-car-c AYC*
—	12	4	**3 Is a Family**	*com A*
—	—	3	**Three's a Crowd**	*cri-mel A*
2	10	3	**Thrill of a Romance**	*mus-com-c A*
1	13	1	**Thunderhead, Son of Flicka**	*wes-dr-c AYC*
1	12	3	**Together Again**	*com A*
1	12	5	**Tonight and Every Night**	*war-mus-com-c A*
1	5	3	**Town Went Wild, The**	*com AYC*
7	10	—	**Tree Grows in Brooklyn, A**	*dr AY*
—	—	3	**Trouble Chasers**	*com A*
—	6	3	**Twice Blessed**	*com A*
—	3	7	**Two O'clock Courage**	*cri-mel A*
—	1	6	**Under Western Skies**	*mus-wes AYC*
—	6	9	**Unseen, The**	*mys-mel A*
—	2	1	**Ural Front, The**	*war-dr A*
—	5	3	**Utah**	*mus-wes AYC*
3	8	1	**Valley of Decision, The**	*dr A*
—	1	8	**Vampire's Ghost, The**	*mys-mel A*
—	4	—	**Vigilantes of Dodge City**	*wes AYC*
—	2	7	**Wait for Me**	*war-dr A*
2	9	1	**Way Ahead, The**	*war-dr A*
—	2	3	**We Accuse**	*war-doc A*
1	3	—	**Weekend at the Waldorf**	*mus-com A*
—	7	—	**West of the Pecos**	*wes AYC*
—	5	3	**What a Blonde**	*com A*
1	11	1	**Where Do We Go from Here?**	*mus-fan-c A*
—	—	3	**White Pongo**	*mel AYC*
—	1	2	**Wildfire**	*wes-c AYC*
—	2	4	**Within These Walls**	*soc-dr A*
—	12	2	**Without Love**	*rom A*
—	8	4	**Woman in Green, The**	*mys-mel AYC*
3	11	1	**Wonder Man, The**	*mus-com-c A*
—	2	3	**Why Girls Leave Home**	*mus-mel A*
—	8	1	**You Came Along**	*war-mus-dr AYC*
—	4	5	**Youth on Trial**	*dr A*
—	1	9	**Zombies on Broadway**	*com A*
—	—	8	**Zoya**	*war-dr A*

The Consumers' Observation Post

[Continued from page 4]

sults of late—for the OPA now says that you, too, can buy a filet mignon to take home. (To which we would add, if you can find it and have the needed red points.) It appears that the retail butcher may provide the filet as part of a large cut of porterhouse or tenderloin steak. All of which sounds to us very much like legitimatizing those tie-in sales which the OPA on other occasions has been dead set against.

* * *

CHRISTMAS FOR MEN AND WOMEN OVERSEAS is again to be planned for, if the parcels are certain to arrive in time. What NOT to send according to advice from the Navy includes: Fancy toilet kits, cigarettes, soft candy, cakes and cookies. The recommended items are: Snapshots of and from the home folks, canned luxury foods, books, writing portfolios, pipes, fountain pens, and cigarette lighters for the men; snap shots, lingerie, stockings, and play clothes for the women.

* * *

"I'LL TAKE VANILLA" has joined "A couple of new tires, please," as largely a pre-war phrase. The place of vanilla ice cream has been taken, but not filled, by such concoctions as raisin custard, banana, cherry, various sherbets, and other wartime substitutes. It appears that vanilla ice cream must be a well-flavored, high-quality product to secure public acceptance and as it costs more to manufacture a good vanilla ice cream than some of the acceptable fruit ice creams, the manufacturers find ways to keep vanilla production down. One sales manager writing in the trade's journal doesn't come right out and advise giving up vanilla altogether but he does point out that "there isn't a thing in the world to keep him [the ice cream manufacturer] from skimming extra profit off his market with ice creams of other flavors... under wartime restrictions, there are sound economic reasons why he should turn to these more flavorful additions to his line. They offer a real opportunity to increase volume without increasing consumption of scarce butterfat and milk solids." From the consumer's point of view, this is another one of the many cases where government wartime restrictions have encouraged or favored lower quality or higher prices

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for the same quality. Dealers no longer get the ice cream they and their customers want; they take what the route salesman offers, or go without.

* * *

WHEN YOU BUY VITAMINS you may or may not get what you are paying for. Out of 183 samples of various vitamin preparations examined by the Food and Drug Division of the Massachusetts Department of Public Health, the Bulletin reports that more than one third were of low potency. Some, indeed, contained less than 50 percent of the specified vitamin content. The same condition prevailed in a number of vitamin-fortified foods examined. Out of 91 examined, 21 were of low potency. In some cases the vitamin A content of oleomargarine was found to be less than 10 percent of the specified potency.

* * *

NEW PRODUCTS: Evershine Cleaner is a mixture sold at 25c for 4 fluid oz., for removing grease spots, stains, and discolorations from porcelain-enameled stoves and gas ranges. Chemical analysis shows that the product is a soda soap (the most common type of soaps for household and toilet use are soda soaps) with added abrasive in the form of tripoli. There is also pine oil as a cover odor, and a trace of color. Evershine furnishes a means of doing in a rather expensive way what can be done quite well with ordinary household materials such as the whiting-trisodium phosphate mixture in proportions of 9 parts of whiting to 1 of trisodium phosphate recommended by CR for cleaning of porcelainware, lavatories, washtubs, etc.

Des-Tex Foam is an example of the widely-sold type of moth-protection product that is based on a solution of sodium silicofluoride in water with perhaps a small addition of formaldehyde and a wetting agent intended to improve penetration of the liquid into the garment being treated. Action has recently been taken by the U. S. Department of Agriculture against Des-Tex Foam under the Insecticide Act, on the ground that the product was ineffective in protecting against moths when used according to directions and also because it was misbranded, in its failure to show percentage of inert substances present. The government's finding in this case is interesting, because it indicates the unsuitability of products of this general type for their claimed purpose. Consumers will be well-advised not to buy moth-treating products which do not show names and percentages of their effective ingredients on the label, or whose composition is shown as water plus sodium silicofluoride or similar salt equivalent to about one-tenth to one-half of one percent plus a wetting or surface-active agent (soap substitute) or soap.

Rad, sold as an "all-purpose cleaner," which has some popularity at this time, is a cream-colored paste with the odor of pine oil. An analysis of this product made about two years ago indicated the presence of about 34% trisodium phosphate, 2-1/2% sodium carbonate (washing soda), 4-1/2% soap. The rest was chiefly water, with pine oil for odor.

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PHONOGRAPH RECORDS

By Walter F. Grueninger

Please Note: Prices quoted do not include taxes. In the ratings AA indicates highly recommended; A, recommended; B, intermediate; C, not recommended.

ORCHESTRA AND CONCERTO

Debussy: Two Nocturnes—*Nuages* & *Fetes*. Philadelphia Orchestra under Ormandy. 4 sides, Columbia X247. $2.50. Standard numbers inspired, in the first instance, by the slow motion of clouds and the sky and in the second, by vibrating rhythms of the festival. The complete Nocturnes include, also, the rather feeble *Sirenes* which appears only in the leading competitor, Stokowski's Victor Set 630 ($3.50). The recording of both sets is admirable though the new Columbia offers just a trifle more of everything worth while. *Nuages* is better performed by Ormandy who plays it straight, whereas Stokowski stresses "sound" to the detriment of line and the composition as a whole. Both play *Fetes* brilliantly. Overall, Columbia X247 has the edge. **Interpretation AA**
Fidelity of Recording AA

Gershwin: *An American in Paris*. Philharmonic Symphony Orchestra of New York under Rodzinski. 4 sides, Columbia Set 246. $2.50. This rhapsody, with the haunting blues section, concerns a homesick American in Paris. One of Gershwin's lesser serious compositions. **Interpretation AA**
Fidelity of Recording A

Gershwin: *Porgy and Bess*—A Symphonic Picture.,

Pittsburgh Symphony Orchestra under Reiner. 6 sides, Columbia Set 572. $3.50. **Interpretation AA**
Fidelity of Recording A

Indianapolis Symphony Orchestra under Sevitzky. 6 sides, Victor Set 999. $3.50. **Interpretation C**
Fidelity of Recording B

Arranged by Robert Russell Bennett. I prefer the music in its original form, without inflation. Turning to tempos and feeling for the idiom and recording, Reiner's Columbia set certainly has it over Sevitzky's Victor set.

Gershwin: *Rhapsody in Blue*.

Oscar Levant (piano) & Philadelphia Orchestra under Ormandy (3 sides) & *Preludes 2* and *3*. Oscar Levant (piano) (1 side). Columbia Set X251. $2.50.
Interpretation AA
Fidelity of Recording AA

Jesus Maria Sanroma (piano) & Boston Pops Orchestra under Fiedler (3 sides) & *Strike Up the Band*. Boston Pops Orchestra under Fiedler. (1 side). Victor Set V-SP3. $2.25. **Interpretation B**
Fidelity of Recording B

One of Gershwin's most popular compositions. Columbia Set X251 now stands at the head of the recording list on the basis of performance and fidelity of recording. Levant plays this composition in the motion picture, "Rhapsody in Blue." On side 4 he plays two of the three *Preludes* he recorded in Columbia Set 508. The Victor is merely another pressing of Set 358 under a new number, released in an envelope package instead of the more substantial album.

Saint-Saens: *Concerto No. 4*. Casadesus (piano) and Philharmonic Symphony Orchestra of New York under Rodzinski. 6 sides, Columbia Set 566. $3.50. A superficial work played beautifully by a master performer of French music who is ably supported. **Interpretation AA**
Fidelity of Recording A

Tschaikovsky: *Mozartiana* Suite. Philharmonic Symphony Orchestra of New York under Rodzinski. 4 sides, Columbia Set X248. $2.50. An orchestration of four compositions by Mozart in which Tschaikovsky leaves the stamp of his own personality, adding little or nothing to the originals. Played with a heavy hand. First recording of this composition. **Interpretation B**
Fidelity of Recording AA

Roumanian Fantasy. Andre Kostelanetz and His Orchestra. 2 sides, Columbia 7427. $1. Interesting folk material dressed in Sunday clothes, played with spirit and recorded well. Short measure on side 2. **Interpretation AA**
Fidelity of Recording AA

PIANO

Chopin: *Polonaise in A Flat* (Op. 53 No. 6) José Iturbi (piano). 2 sides, Victor 11-8848. $1. The composition featured in the motion picture, "A Song to Remember," where Iturbi played it for the sound track. Frequent buzzes encountered on side 1 with two different pickups mar the reproduction, though this may clear up in subsequent playings, which would justify a higher fidelity rating. **Interpretation A**
Fidelity of Recording B

A Vladimir Horowitz Program. Vladimir Horowitz (piano). 6 sides, Victor Set 1001. $3.50. To packed houses Horowitz has played these lightweight numbers during the past season. Included are Saint-Saens' *Danse Macabre*, Czerny's *Variations on the Aria La Ricordanze*, and Tschaikowsky's *Dumka*. The performer easily meets every technical challenge. In the reproduction of the set, buzzes turned up rather frequently.
Interpretation AA
Fidelity of Recording A

VOCAL

Villa-Lobos: *Serestas*. Jennie Tourel (mezzo-soprano). 4 sides, Columbia Set X249. $2.50. A distinctive set. The music, Brazilian in flavor and sung in Portugese, resembles little you hear in our concert halls. Miss Tourel, who records in this country for the first time, has been known to concert and opera goers since 1942 to have extraordinary talent, as she proves here. The composer conducts the accompanying orchestra, assuring a definitive performance.
Interpretation AA
Fidelity of Recording AA

LIGHT AND POPULAR

Gallop-Litman-Nevins: *What Would Annie Say* & **Nevins-Dunn-Nevins:** *Midnight Time*. The Three Suns. 2 sides, Majestic 7143. 50c. Only moderately well does Artie Dunn sing the vocal in the comic song, *Annie*. Overside is an instrumental foxtrot arrangement of Sibelius' *Valse Triste*.
Interpretation A
Fidelity of Recording A

Gershwin: *Porgy and Bess Selections*. Charlie Spivak and His Orchestra. 4 sides, Victor Set SP6. $1.25. All instrumental, foxtrot arrangements of *Ain't Necessarily So, Bess You is My Woman, I Got Plenty of Nullin', Summertime*. Only for those who like Gershwin's folk-opera music in sweet swing. **Interpretation AA**
Fidelity of Recording AA

Gershwin: *Show Hits*. Dinah Shore (vocalist). 4 sides, Victor Set SP5. $1.25. Selections are *The Man I Love, Do it Again, Love Walked In, Someone to Watch Over Me*, etc. The popular, sultry voiced singer covers the songs with her own personality rather than Gershwin's, singing all numbers in a slow, foxtrot tempo with the result that I find the set monotonous and disappointing. **Interpretation B**
Fidelity of Recording AA

Rodgers: *June is Bustin' Out All Over*. Thomas L. Thomas (baritone) & *If I Loved You*. Nan Merriman (mezzo-soprano) & Thomas L. Thomas (baritone). 2 sides, Victor 10-1174. 75c. From the Broadway musical play "Carousel"—the spirited hit song and the love song. **Interpretation AA**
Fidelity of Recording AA

Rodgers: *You'll Never Walk Alone*. Nan Merriman (mezzo-soprano) & Thomas L. Thomas (baritone) & *What's The Use of Wond'rin'*. Nan Merriman (mezzo-soprano). 2 sides, Victor 10-1175. 75c. Slow tunes of no great charm, from "Carousel." **Interpretation A**
Fidelity of Recording AA

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